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APARTMENT PARKING REQUIREMENTS
IN
METROPOLITAN TORONTO

Metropolitan Toronto Planning Board

December, 1968

APARTMENT PARKING REQUIREMENTS
IN
METROPOLITAN TORONTO

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CONTENTS

| | | |
|------|---|----|
| I. | STUDY BACKGROUND | 1 |
| | (a) Introduction | 1 |
| | (b) Survey Outline | 1 |
| II. | AMOUNT OF PARKING PROVIDED | 6 |
| | (a) Total Parking Provision | 6 |
| | (b) Location of On-Site Parking | 7 |
| | (c) Visitor Parking | 8 |
| III. | USE OF AVAILABLE PARKING FACILITIES | 10 |
| | (a) Tenant Survey | 10 |
| | (b) Building Survey | 10 |
| IV. | CAR OWNERSHIP | 12 |
| | (a) Tenant Survey | 12 |
| | (b) Building Survey | 15 |
| V. | DEMAND FOR VISITOR PARKING | 23 |
| VI. | FORMULATION OF APARTMENT PARKING POLICY | 25 |
| | (a) Variability in Survey Data | 26 |
| | (b) Measurable Variables | 29 |
| | (c) Estimated Increases in Car Ownership | 32 |
| | (d) Tenant Parking Policy Considerations | 34 |
| | (e) Visitors' Parking Policy Considerations | 35 |
| VII. | SUMMARY OF MAIN FINDINGS | 38 |

LIST OF TABLES

1. Type of Apartment Unit
2. Parking Ratios Provided in Apartment Buildings Erected 1961-1967.
3. Grouping of Buildings by Ratios of Parking Provided.
4. Provision of Visitor Parking at Apartments.
5. Location of Parking for Tenant Vehicles.
6. Use of Available Parking by Tenants.
7. Unused Parking Facilities at Apartments.
8. Average Car Ownership Ratios at Apartments.
9. Sampling Variability of Car Ownership Ratios.
10. Average Car Ownership per Person.
11. Average Car Ownership by Household Income.
12. Average Household Income at Apartments.
13. Average Rentals at Apartments.
14. Assumed Ratios of Car Ownership by Building Survey.
15. Comparison of Car Ownership Ratios from Building and Tenant Surveys.
16. Variability of Car Ownership Ratios in Individual Buildings.
17. Demand for Visitor Parking.
18. Location of Visitor Cars.

MAPS

1. Geographic Areas.
2. Average Car Ownership Ratios by Sub-Area.

I. STUDY BACKGROUND

(a) Introduction

In October 1966 , the Metropolitan Toronto Planning Board published the report on its study of apartment distribution and density.* That report contained a description and brief discussion of the policies of local municipalities with regard to the provision of off-street parking for apartments. It also referred generally to the limited statistical bases used by some municipalities to justify certain parking policies which they had adopted, and to apparent anomalies in the standards of different municipalities especially when compared with relative levels of car ownership, the usual empirical base for formulating such standards.

It was recommended in the study report that a parking ratio of 125% (of the number of dwelling units) be used by the Board in evaluations of apartment proposals, with further consideration to be given to possible, feasible variations from this standard. The inference that the Metropolitan Planning Board should adopt a formal policy respecting apartment parking requirements was generally discouraged by the local municipalities, and the Metropolitan Apartment Development Control Policy accordingly operates in this matter only to ensure that present minimum local apartment parking standards will not be unjustifiably relaxed until the whole question of apartment parking requirements can be reviewed comprehensively. This study was undertaken to facilitate such a review.

(b) Survey Outline

The collection of data for the apartment car ownership and parking study was undertaken at two different levels: the

* Metropolitan Toronto Planning Board, "Study of Apartment Density and Apartment Distribution in the Metropolitan Toronto Planning Area"; October 1966.

individual apartment household, and the group of households constituting the "profile" of an apartment building. Other studies on this subject have usually concentrated on one but not both of these survey techniques. The field surveys and compilation of data were undertaken by Recon Research Consultants Limited of Toronto, commencing with a building survey and pilot tenant survey in December 1967 and a final tenant survey in May 1968.*

The Building Survey fulfils several functions by providing

1. the necessary inventory for selecting a sample for the tenant survey;
2. data on the amount of parking provided for tenants and visitors, for comparison with municipal standards and actual usage;
3. data for determining tenant parking demand, for comparison with the tenant survey and other building surveys;
4. data on the extent and possible reasons for variability in car ownership as found in individual buildings.

The ratios of car ownership in the Building Survey are approximate because they are derived from landlords' records of parking spaces rented to tenants which (in this survey) are related to the total number of units rather than to the number of occupied units in a building. The use of these ratios is justified, however, because most landlords today

* Recon Research Consultants Limited, "A Survey of Traffic and Parking at Apartments Within Metropolitan Toronto", conducted for the Metropolitan Toronto Planning Board, September 1968.

charge separate rentals for parking and maintain detailed accounts of such rentals, and, of course, a much larger sample base of units can be obtained from building surveys than from tenant surveys. In addition, apartment vacancies in Metropolitan Toronto have recently been very low; and the Tenant Survey confirms that only a very small percentage of tenant cars are not parked at the place of residence.

One other qualification applies to the Building Survey (as well as to the Tenant Survey). Since a large-scale building survey was conducted in 1961,* and because fairly significant changes have taken place in the distribution and character of apartment buildings erected since 1961, the current survey was restricted to buildings erected in Metropolitan Toronto between 1961-1967 as identified from the Apartment Inventory maintained by the Metropolitan Toronto Planning Board. This means that out of a total inventory in April 1967 of 153,200 units in 4,000 buildings, 66,000 units in 600 buildings were eligible to be included in the survey. A data sheet for each of almost 550 of these buildings was obtained with the cooperation of the landlords or their managers or supervisors, detailing unit types, rental ranges, the number and location of parking spaces for tenants and visitors, parking rentals, and the number of parking spaces rented by tenants.

In reviewing the data sheets for this study, very small buildings (usually with less than 50 units and built between 1961-1963) and all public housing units were deleted together with a number of buildings for which the returns were incomplete or "doubtful" in respect to any of the items to be considered. The final survey yield for reporting the results of the survey in this report comprises 43,258 units in 348 buildings (see Table 2).

* Metropolitan Toronto Planning Board, "Apartment Survey 1961"; June 1962.

The sample for the Tenant Survey had to meet two basic requirements:

1. complete random selection;
2. a size large enough that the resulting mean values of the sample would adequately represent the universe within tolerable limits.

With regard to item 1, the random selection was made from the 1961-1967 building inventory reduced by eliminating all public housing and small buildings. (Even where the Building Survey did not obtain data for a particular building, that building was included for sampling in the Tenant Survey.)

Item 2 presented the additional problem that statistical reliability was required for the several variables normally associated with car ownership. Because of the cost factor, and having regard for the practical use of any variable in the formulation of policies, the sample design was limited to a basic three level stratification:

1. geographical area, as presently defined in the Metropolitan Apartment Development Control policy; and
2. type of apartment unit by number of bedrooms;
3. building size (100 units or more).

These decisions were based on the results of a pilot sample conducted prior to the main Tenant Survey. (The sample design, sample yield and use of weighting factors in tabulation are described in the Recon report). The final sample frame was 2,190 units selected within 386 buildings, which yielded 1,707 (75%) completed questionnaires.

The basic data obtained from this survey are

1. car ownership, related specifically to type of apartment unit and geographic location; and
2. visitor parking demand, related to geographic area.

Supplementary data covering population characteristics, incomes, rentals, etc., were obtained and tabulated. These data indicate trends and suggest relationships with car ownership, but they are not statistically validated and therefore do not represent the sample universe as is the case with the basic data.

II. AMOUNT OF PARKING PROVIDED

(a) Total Parking Provision

The Apartment Distribution and Density Study observed that in 1966 all municipalities in Metropolitan Toronto generally required at least one off-street parking space to be provided for each apartment unit. It noted, however, that local policy specifications varied in the additional amounts of parking required, so that the total amount of parking fell within the range of 100 to 125 spaces per 100 units. Current local standards have not all been used continuously since 1961, however, and some municipalities whose parking standards differed in the original study have since been amalgamated with others to form the five boroughs and the City for which data are now reported.

Table 2 shows that the average parking ratio for buildings built between 1961-1967 in Toronto, York and East York was about 110%, while in the three outer boroughs the ratios varied more widely between 105-135%.

In some municipalities, these ratios are lower than expected. Table 3 shows buildings with less than 100% parking in four of the six metropolitan municipalities. The majority of buildings in three of these municipalities provide less than 112-1/2%, while the majority of buildings in the fourth (Toronto) provide less than 125%, the standard which has been required in that municipality since 1958. In some cases, the failure of development to provide parking in accordance with the general standard can be explained by specific exceptions permitted by site plan by-laws.

Tables 2 and 3 also show that a significant number of buildings have been erected with parking ratios exceeding the maxima required by local zoning by-laws. Two reasons may be advanced for this condition:

1. the greater availability of ground level space in the highrise developments of generally lower density apartment areas such as Etobicoke;
2. construction of more spaces than the local standard requires when it is necessary to build second or third levels of underground parking particularly in the high-rise developments of generally higher density apartment areas, and in small site redevelopment areas.

It is also apparent from the survey that most of the buildings providing more parking than zoning by-laws require are in the higher rental group, thereby supporting the view that some builders are closely attuned to the demands of the market irrespective of municipal requirements.

(b) Location of On-Site Parking

Table 2 indicates that the greatest incidence of indoor parking occurs in the three inner municipalities of Toronto York and East York. The term "indoor" is today virtually synonymous with "underground", but until about 1964 it also included parking on the ground floor of some apartment buildings and in detached garages and carports, particularly in the three outer boroughs of Etobicoke, North York and Scarborough. The trend to more indoor parking, now apparent in most municipalities, is particularly significant, therefore, in the outer boroughs where 50-70% of the required parking

must be located underground. While underground parking is usually desirable for environmental and aesthetic reasons, it should be recognized that it can only be provided at some additional cost to both builder and tenant, and with some added difficulty in providing and managing visitors' parking areas and in making them readily accessible to visitors.

(c) Visitor Parking

Although it has been generally assumed that any parking provided in excess of 100% is for visitors, few local zoning by-laws specify the amount or location of visitors' parking, and even less attention appears to have been given to enforcement in municipalities where visitors' parking is specifically required. This problem is becoming more prominent as municipalities increasingly consider apartment proposals in the context of site-plan control procedures; and some builders have attempted to resolve the problem on their own initiative despite the lack of clear municipal policies.

The questionnaire used in the survey did not explicitly differentiate between available, "unused" and visitors' parking; and discretion had to be used in tabulating some returns, particularly where driveways and underground garages were named as "available" for parking. In the final analysis, the figures presented in the tabulations are considered most likely to overrepresent the availability of useable visitors' parking.

There are three general conclusions to be reached from the analysis of this aspect of the survey, as summarized in Table 4:

1. the ratio of visitors' parking provided is generally less than the 12-1/2% most commonly assumed to be the minimum requirement;

2. newer buildings have provided higher total parking ratios and fewer cases where no visitors' parking is supplied (at least in four of the six metropolitan municipalities);
3. the provision of 100% tenant parking is not always adequate, particularly in the three outer boroughs, with the result that parking areas provided for visitors are pre-empted to some degree by tenants and visitor parking becomes merely the residue not currently required by tenants.

The reasons for the inadequacy of visitor parking facilities are difficult to identify. In the case of many apartment buildings, it is obvious that designated visitor parking spaces are often used by tenants for short-term parking. The higher cost of indoor tenant parking also tends to increase the demand for permanent, cheaper, outdoor tenant parking. Most municipal parking policies could be improved, but it is apparent that the effectiveness of any visitor parking policy will be limited by the need for constant supervision and policing by management, and it has recently been pointed out that management's ability to control non-tenant parking is complicated by municipal by-laws which permit parking on private property with the consent of the occupant as distinct from the owner of a property. It has become virtually impossible, therefore, for management to determine whether cars parked at an apartment building are authorized by a tenant or are trespassing.

III. USE OF AVAILABLE PARKING FACILITIES

(a) Tenant Survey

This survey indicates that 3% of all tenant-owned vehicles are not parked on the premises at which the tenant resides, with only 1% parked on local streets (Table 5) and 2% at private, off-site locations. Slightly higher-than-average percentages of off-site parking are found in York and Scarborough (4.4%), while East York has the lowest incidence (0.2%). Street parking is highest in York, but no street parking is reported in East York and North York.

All of the reasons for off-site parking are not known. In some cases, parking may not be available to tenants, but such cases are few if the evidence of the Building Survey is to be believed. Cost could also be a factor in areas where underground parking predominates or in areas of low rent, both of which reveal a high incidence of off-site parking. Of the private, off-site parking facilities used, lots predominate over garages in a ratio of 6 to 1.

(b) Building Survey

The fact that some tenants do not park where they live is partly counterbalanced by the use of apartment parking facilities by non-tenants, particularly in Toronto and York, as reported in the Building Survey.

Although conditions vary considerably between individual buildings, the overall view of the amount of available parking "used" by tenants, visitors and "others" given in Table 6 suggests the following:

1. almost 30% of apartment parking available in Toronto is "unused";

2. the amount of parking unused in York (16%) would have been higher except for a fairly marked trend to a higher level of use in recently constructed buildings;
3. there is very little unused parking in East York because
 - (a) in the Cosburn Ave. area, the amount provided is usually only 100%;
 - (b) in Thorncliffe Park, the other main apartment area, the greater amount of parking provided is offset by higher car ownership;
4. in the outer boroughs, with the exception of Etobicoke, there is evidence of tenant pressure to make greater amounts of outdoor parking available to tenants.

Table 7 describes the "unused" number of parking spaces per 100 apartment units. On the basis of these data, it seems reasonable to assume that

1. it is necessary for visitors to use indoor parking in York, East York and North York, i.e. the demand for visitors' parking is greater than the amount of unused outdoor parking available;
2. there are apartment buildings in Toronto and Scarborough where visitors' cars are directed to indoor locations or are prohibited from parking on-site. In such buildings, the observed visitors' parking demand is smaller than the amount of unused outdoor parking available.

IV. CAR OWNERSHIP (TENANT PARKING DEMAND)

(a) Tenant Survey

The results of the Tenant Survey of car ownership are given in Table 8*.

No previous tenant survey for the whole Metropolitan Area has been undertaken to allow direct comparison of their results. The ratios of car ownership shown in Table 8 for the City of Toronto, for example, are higher than those obtained in a survey conducted by the City of Toronto in 1966, partly because the sample bases used in the two surveys were quite different. In the Metropolitan Tenant Survey, older buildings, which most surveys show to have lower ratios of car ownership, were omitted as tending to give false pictures of current apartment development practices, while newer buildings in Forest Hill and Swansea, which generally have higher ratios, were included. The Metropolitan survey, however, supports the observation reported in the earlier City of Toronto survey that more cars are owned by households occupying the larger units, having larger incomes and paying higher rentals.

*It should be noted that each figure has a possible variance which is associated with the sampling technique. This means that the average of the sample taken represents the average of all units available for survey only within the range of deviation given in Table 9. For example, the overall average of 92 cars per 100 households in the sample universe constitutes a 95% probability that the actual average of the total universe is between 88 and 96 cars per 100 units.

There are, however, significantly higher levels of variance than the example quoted. In two cases particularly, a very large variance results from very small samples. In general, the range of deviation varies inversely to the size of the sample. If these data are used for predictive purposes, therefore, regard should be held for a margin of error which may tend to grow larger if the empirical ratios of car ownership are used in an alien context.

Although the municipalities in Metropolitan Toronto generally require an apartment developer to provide at least 100% tenant parking, the tenant car ownership survey shows that such a ratio

1. is currently too high in Toronto and some parts of York;
2. is at the point of being too low in North York and East York;
3. would be too low in Etobicoke if developers did not provide more parking on their own initiative.

Such a comparison between the required provision and use of parking spaces is, of course, subject to determining the extent, if any, to which future car ownership will create a materially different demand for tenant parking than is experienced today. The comparison also reveals differences in tenant parking demand for different geographic areas on the order of 10-20 cars per 100 units. This raises the question whether it would be feasible for a single municipality to adopt an apartment parking policy which would not be uniform for all parts of that municipality.

Table 8 shows that the average ratios of tenant car ownership vary

1. directly with increasing apartment size (number of bedrooms), i.e. the ratios increase across each row in the table;
2. directly with distance from the Central Area, (the geographic areas being basically concentric to the Central Area, and the metropolitan boroughs having a similar structural relationship to the City of Toronto), i.e. ratios increase down each column of the table;

3. inversely to the level of public transit available at apartment locations within each geographic area, (generally lower with rapid transit, increasing with frequent surface transit, and higher again with less frequent or no surface transit).

This observation is one of associations rather than relationships, and can be explained in quantitative terms. Unit size is a variable helping to explain differences in car ownership: car ownership changes in relation to geographic area and transit location which in turn influence the size of the average apartment unit. If the ratios per 100 units by unit type are expressed as ratios per 100 persons (or more particularly adult persons), the variation in the ratios between different unit types in a given area is reduced considerably (Table 10). Thus, if household size is considered to be a function of unit size, much of the variation in the majority of cells in the table can be explained away.

Other factors appear to explain the remaining variations in the ratios of car ownership to tenant parking. Table 11 shows that car ownership increases with income. For households in the same income range, car ownership increases with distance from the Central Area. Since, however, income itself tends to decrease with distance from the Central Area (Table 12), it seems reasonable to assume that high car ownership occurs in the Outer Area in spite of lower incomes, and, conversely, that low car ownership occurs in the Central Area in spite of higher incomes. It is on this premise that proximity to the Central and Inner Areas' concentrations of employment opportunities, to their administrative, retail and recreational facilities, and to rapid transit is seen as a force which influences the location of people who are not primarily concerned with whether a car is needed for transportation. In considering the higher levels of car ownership in three-bedroom apartments in the Central and Inner Areas, and in apartments of all

sizes in the Inner Area as compared with the Central and Intermediate Areas, it would appear that high incomes support a higher level of car ownership in spite of the convenience of location and rapid transit. This effect is similar to that where high income households are found to rent larger apartments than they require to meet basic needs. In these circumstances, the extra rooms or cars are "luxuries" beyond the economic reach of the much larger number of "average" households.

The Tenant Survey shows variations of this kind related to income occur within individual buildings which usually have a mixture of unit types. Table 13 shows similar variations related to rental. If it is assumed that a direct relationship generally exists between income and rent, the Building Survey should show similar variations.

(b) Building Survey

1. Comparison with Other Surveys

Car ownership ratios have been derived from the Building Survey for the reasons, and subject to the limitations explained in the Introduction to this report.

In Table 14, car ownership ratios are compared by municipality with the last large-scale survey of this type conducted in 1961 by the Metropolitan Toronto Planning Board. Newer construction was emphasized in the samples of the 1961 survey as it has been in the current Building Survey. The car ownership ratios for buildings erected 1954-61 as identified in that survey, therefore, provide a reasonably sound basis for comparison with the ratios derived from the 1968 survey.

Table 14 shows that the average ratios of car ownership have increased in four of the six Metropolitan municipalities. For the most part, this may be explained by a changing pattern of apartment distribution. For example, the 1968 sample contains a large representation of apartments in locations where

heavy use of cars would be anticipated, (such as the westerly parts of York including Weston, Thorncliffe Park and other locations in East York, and the north-central and northerly parts of Etobicoke). Similarly, a large part of the 1961-68 increase in metropolitan average car ownership from 70 (or 76) to 88 cars per 100 units in 1968 as shown in the survey is attributable to a greater representation in the total sample of units in the outer boroughs. Any absolute change in car ownership per se, therefore, is difficult to measure from this comparison.

An attempt was made in the current survey to restudy the buildings of post-1954 origin contained in the 1961 survey. 40% of the questionnaires were returned completed, representing 4,274 units in 64 buildings across Metropolitan Toronto. From these, a trend has been observed to lower car ownership in these buildings, reflecting an increase in non-car households and a slight decline in one-car households. Surprisingly, perhaps, part of the decline is offset by an increase in two-car households. Overall, car ownership in these buildings appears to have declined from 82 cars per 100 units in 1961 to 72 per 100 in 1967. Although the 1968 resurvey of buildings originally surveyed in 1961 provides a limited basis for determining future parking policy, it would appear that the tenant parking demand in older buildings decreases over time notwithstanding generally increasing car ownership. If this proposition is true, (64 buildings may not be adequate for proving the case), it may not be necessary to consider future car ownership as a factor influencing or determining the amount of parking which an apartment developer should be required to provide.

Surveys carried out by local municipalities were not comprehensive enough to be useful in this study. It is understood, however, that Scarborough has attempted to assess the validity of

current borough parking standards by comparing the number of cars parked on streets adjacent to an apartment building with the number of vacant parking spaces on the apartment site. Also, in 1967, North York surveyed a sample of 25 buildings containing 5,460 units. A parallel survey of 29 buildings (5,708) in North York was undertaken by the Urban Development Institute. The two North York surveys observed car ownership ratios of 112 and 95 respectively, essentially confirming the ratio of 100 found in metropolitan surveys, while at the same time revealing that differences can result from relatively small selective samples. (Each of the North York surveys contained only about one-fifth the number of buildings of approximately the same age used in the metropolitan survey).

A comparison of car ownership as derived from the Building and Tenant Surveys is shown in Table 15. For Metropolitan Toronto as well as for most of the geographic and municipal subdivisions, the ratios are slightly lower in the Building Survey; but in view of the lack of any great disparity between the two surveys, it is considered useful to analyse the Building Survey to determine what relationships it may expose which could have a direct bearing on the formulation of municipal apartment parking policy.

2. Variations in Average Car Ownership

With one exception, average car ownership by municipality as revealed by the Building Survey (Table 14) varies little between buildings erected in 1961-64 and those erected in 1964-67. In York, however, the average car ownership ratio of 89 cars per 100 units in buildings erected from 1964-67 is much higher than the ratio of 62 for the earlier period. (A large part of this increase appears to be attributed to recent apartment development in the St. Clair - Bathurst area where the larger and more expensive of York's apartment

units have been erected. This apartment concentration also constitutes 50% of the relatively small number of buildings in the York apartment inventory). For each municipality, of course, average car ownership has been determined by averaging the car ownership of a number of sub-areas, and within each sub-area there is also the possibility of wide variations in car ownership. In Toronto, for example, car ownership varies from 46 to 96 cars per 100 units for different building groups. The sub-area variation in Etobicoke is from 90 to 130 cars per 100 units. In general, the greatest variation in car ownership between sub-areas in any municipality appears to be attributable to the relative ages of the apartment buildings in the sub-area groups. Map 2 shows car ownership by location of the sub-area in the metropolitan structure. It suggests that car ownership increases

(i) with distance from the Central Area*;

(ii) with distance from the highest levels of public transit service.

The same basic relationship between car ownership and geographic location was revealed in the Tenant Survey. This distribution is useful mainly for identifying trends in car ownership and for comparative purposes, but there are few inconsistencies in the general pattern. The high rates of car ownership found in the Eglinton-Bathurst area and parts of central Etobicoke, the low rate found in Parkdale, together with the small variations found in the outer boroughs, appear primarily to reflect differences in rent. In other words, higher rental areas have higher rates of car ownership.

A detailed examination of the Building Survey shows that average car ownership in the Central Area* of 57 cars per 100

*As defined in the Metropolitan Apartment Development Control Policy. (See Map 1 attached).

units is attributable to two quite different groups of buildings:

- (i) those with lower rentals and providing less than 100% parking, most but not all of which are in St. James Town complex where car ownership rates by building average 42-48 cars per 100 units;
- (ii) higher rental apartments in the vicinity of Yonge Street and in the Annex where car ownership rates by building average 60-70 cars per 100 units.

Having made this observation, it is interesting to note that the two most recently completed buildings in St. James Town have rentals higher than older buildings in the same complex, and a greater amount of parking has been provided than the developer was required to provide under the special zoning provision of 50% to 80% applicable to St. James Town. The Building Survey of St. James Town was taken at a time when there was 50% occupancy of the newer buildings in the complex and revealed an ownership rate in these buildings of 70 cars per 100 units.

In the Inner Area*, ownership ratios higher than 100% are found in association with high-rental apartments in the Deer Park area and with larger household size in the Eglinton-Yonge Area. The most recent apartment development on sites near the subway in the Eglinton-Yonge area, however, suggests a trend to smaller units presumably in an attempt to maintain moderate rent levels in an area of high demand for apartments. Thus, a car ownership ratio of 52 is recorded for some recent buildings near the Yonge subway line while a ratio of 70 is recorded for buildings in other areas where higher rents are charged (about \$30 higher for one-bedroom). The wide range

*As defined in the Metropolitan Apartment Development Control Policy.

of car ownership ratios revealed by the Building Survey for the Inner Area reflects the wide range revealed in the sample of the Tenant Survey, and appears to have its foundation in the somewhat ambivalent nature of car ownership levels found in areas influenced by both good transit and high rentals.

The car ownership rates of apartment development in the Intermediate Area* as revealed in the Tenant Survey also vary widely. In the Building Survey, it was observed that car ownership rates in new buildings on the Bloor-Danforth subway line are similar to the rates for such buildings in the Inner Area. (It will be interesting in the future to see if the relationship holds true for new apartments at the extremities of this subway line when they are built). Average car ownership at transit-oriented locations* in the Intermediate Area can be summarized as 80 ± 10 cars per 100 units. The Parkdale area of Toronto, however, has an average of less than 50 cars per 100 units, and the large number of units from this area in the sample has undoubtedly affected the average for transit-oriented locations in the Intermediate Area generally.

Ownership ratios in apartments in the "general"* locations of the Intermediate Area much more consistently approximate 100.

For the Outer Area*, average car ownership as revealed by the Tenant Survey is less subject to variance, a condition which is supported by the Building Survey which reveals a marked grouping of buildings with an approximate ownership ratio of 100 cars per 100 units. Few extreme variations have been found, and there is a fairly consistent relationship between car ownership and rent. The consistency of this relationship

*As defined in the Metropolitan Apartment Development Control Policy.

appears to be largely responsible for the variation in average car ownership in the three outer boroughs. North York has the largest amount of apartment development but a balanced stock of units in the different rent ranges; Etobicoke appears to have more larger households paying moderate to high rentals while a Scarborough household of the same size generally pays a lower rent. Expressed statistically, car ownership in (a sample of) North York apartments averages 103 cars per 100 units, but this average is derived from the ratios found in individual buildings between which there is a variation of ± 24 .

Variations on this scale constitute an obvious constraint on the use of such figures for predicting future apartment parking demand and establishing parking policy to govern future apartment development. A large amount of parking would be superfluous if a standard were established to accommodate the highest levels of ownership indicated in these surveys. The formulation of new parking policies will be further complicated by the fact that it is not known to what extent the car ownership ratios determined by this study have been influenced by

- (i) municipal standards permitting the higher ratios found in the study to be achieved, irrespective of the developer's original objectives (respecting rent, household size, etc.);
- (ii) other specific factors related directly to management or occupancy characteristics at a given time which are responsible for the variations in car ownership found in the study.

The importance of such matters in establishing new parking policy is debatable, however, since the study clearly enough suggests the relationships between parking supply and demand,

and the attraction of a building's facilities for potential tenants requiring such facilities. The conditions described in (i), for example, have been found not to apply to the majority of buildings examined in the study, while for the conditions described in (ii) it is reasonable to assume that the variations exist because within each building the "average unit" varies according to its number of rooms or floor space, as well as to other interrelated factors such as household size, income, rent, etc., most of which it would be extremely difficult to use in any zoning standard. In the North York sample referred to above, average apartment size varied from 875 to 1,330 square feet and the average number of rooms per unit from 2.54 to 3.09. Each of these factors by itself did not correlate particularly well with observed variations in car ownership, but, when combined as gross floor area per room, the deviation from the mean was reduced slightly from ± 24 to ± 22 . Therefore, as was found in the Metropolitan Toronto Planning Board's Apartment Distribution and Density Study, the use of surveys of existing development to produce a single factor of measurement (whether units, rooms or floor area) by which to predict future conditions and thereby establish policy for future development is subject to such limitation as to render suspect any policy based on such a factor. Not only greater empirical validity but also greater flexibility in planning an apartment development can be achieved where variations attributable to observable physical or geographic characteristics are taken into account. For such reasons, the Metropolitan Apartment Development Control Policy allows for variations between geographic regions, variations in locations within regions, and the probable equation between various floor space and unit density combinations. For similar reasons, all observed factors contributing to variations in car ownership and parking demand should be examined carefully in the formulation of apartment parking policy.

V. DEMAND FOR VISITOR PARKING

The Tenant Survey of visitor parking was conducted for a single time period only: one full weekend at a time of the year when it is generally agreed that most "visiting" takes place and when "visits" are largely confined to trips within the urban area.

To determine maximum accumulated visitor parking demand at a given location the times of arrival and departure were observed, and the result is expressed as a ratio of visitor cars per 100 apartment units. As shown in Table 17,

1. the highest ratio of 16.5 visitor cars per 100 units is to be found in the Central Area;
2. the highest ratio in other areas varies only between 10-12.5;
3. the highest ratio in every area occurs on Saturday evening;
4. the peak ratio in every area for other days is slightly lower than the Saturday peak, except in the Outer Area where the Sunday peak of 12.0 occurs in the afternoon;
5. the Central Area also has the longest periods during which a ratio of 10 or more cars per 100 apartments is maintained.

The demand for visitor parking (as observed in the Tenant Survey) is greater than the space available for parking (as observed in the Building Survey). The Tenant Survey which describes where visitors are parking appears to confirm this deficiency.

Table 18 shows that for Metropolitan Toronto as a whole, less than 50% of the visitor parking demand is actually met on the premises of the apartment visited, with the greatest deficiency (just over 40% of the visitor demand met on-site) occurring in the Central and Outer Areas. Nearly 53% of visitor cars to Central Area apartments and 40% to all other areas, were parked on nearby streets. Off-site parking lots accommodated most of the remaining visitor parking demand, including 5% of the Central Area demand and 8% of the Outer Area demand. Presumably, a commercial lot parking fee would be charged in the Central Area, while in the outer boroughs free parking should generally be available on shopping centre parking lots.

These data again appear to confirm that there is a disparity between availability of and demand for visitor parking spaces in areas where underground parking predominates, and in areas of high car ownership where tenant parking demand tends to preempt spaces originally intended for visitor parking.

VI. FORMULATION OF APARTMENT PARKING POLICY

Minimum requirements for off-street parking are generally considered necessary

1. to facilitate the movement of vehicles on public streets;
2. to ensure accessibility to private property without hindrance from parked vehicles;
3. to ensure the provision of proper facilities as an integral part of property development for the convenience of a building's occupants;
4. to protect the continued usefulness of and investment in a building by anticipating its probable future parking needs.

The realization of these objectives is not necessarily totally dependent on the control of parking. It is not always necessary, for example, to ban on-street parking, and most apartment developers are aware that the security of their investments depends on the usefulness and convenience of their buildings being sustained. It is apparent, however, that many municipalities have been unable to come completely to terms with long range problems of prescribing and enforcing off-street parking standards; and, while this study has not been able to identify all of these problems, it is at least more comprehensive and statistically representative than any previous study of apartment parking undertaken for the Metropolitan Area. Its observations, therefore, should prove useful both to the area municipalities in understanding their specific problems more clearly and to the Metropolitan Toronto Planning Board in formulating an apartment parking policy with which it will be able to test the individual apartment projects proposed by an area municipality to determine the compliance of such proposals with the development principles and policies of the Metropolitan Plan.

The formulation of a metropolitan apartment parking policy requires consideration of four questions:

- (a) what has been achieved by obtaining statistical averages, and how can the statistical variability of these averages be overcome in the formulation of policy?
- (b) what measurable characteristic of an apartment building best expresses a relationship with car ownership?
- (c) is it feasible to have different apartment parking standards apply within a single municipality?
- (d) to what extent is it necessary to project current experience to determine future requirements?

(a) Variability in Survey Data

It would be possible for policy purposes to round off the average parking demand revealed by this study for various areas and to assume that this would represent current need for parking. As has been shown, however, the average parking demand for any one area is subject to fairly wide variation, and a policy based on the average demand would tend to be too high for some buildings and too low for others (unless, in the latter case, developers substituted a higher standard of their own). For example, Table 15 indicates that average car ownership in Toronto is 65 cars per 100 units suggesting an off-street tenant parking demand of 65%. Variability in actual demand, however, suggests that if 65% tenant parking had been provided in each building,

1. demand would equal supply in 23 buildings;
2. demand would be lower than supply in 33 buildings, (by a total of about 630 spaces or an average of 19 spaces per building);

3. demand would be greater than supply in 35 buildings, (by a total of about 820 spaces or an average of 23 spaces per building).

If, however, a condition where supply does not meet demand had not been tolerated in any building, and if 100% tenant parking had been provided in every building

1. supply would equal demand in 5 buildings;
2. demand would still exceed supply in 4 buildings, (by a total of 50 spaces or 13 spaces per building);
3. supply would exceed demand in 82 buildings, (by a total of 3,400 spaces or 41 spaces per building).

The example is oversimplified and the conditions it describes are probably exaggerated, but it serves to demonstrate the lack of a useful relationship between actual demand and assumed demand where the assumed demand does not take into account factors such as geographic location, availability of transit, apartment size, rent, etc., which influence actual demand. To some degree, it also demonstrates the weakness in parking policies which are directed towards meeting optimum requirements instead of minimum requirements.

An alternative approach which retains a measure of statistical validity will take into account variations in car ownership (i.e. tenant parking demand) resulting from various factors influencing such demand. The following table suggests the standards which might be used in a parking policy which acknowledges special factors influencing tenant parking demand and which would have met existing tenant parking requirements in the majority of buildings included in this study. The suggested parking ratios shown in the table are not necessarily recommended as parking policy, but are intended to demonstrate possible variations in a policy which would recognize some of the variables influencing parking demand.

| GEOGRAPHIC AREA | AVERAGE CAR OWNERSHIP (Tenant Survey) | PARKING RATIO REQUIRED TO MEET TENANT DEMAND IN: | | | | PARKING STANDARDS SUGGESTED BY STUDY |
|-------------------|--|--|----------------------|-----------------------|-----------------------|--------------------------------------|
| | | Median Bldg. | 75% of all Buildings | 85% of all Buildings* | | |
| | | | | Incl.High Rent Bldgs. | Excl.High Rent Bldgs. | |
| CENTRAL AREA | 55 | 60 | 65 | 70 | 65 | 65 |
| INNER AREA | | | | | | |
| Transit-Related | 67 | 65 | 85 | 95 | 80 | 75 |
| Transit-Oriented | 88 | 85 | 95 | 105 | 90 | 90 |
| INTERMEDIATE AREA | | | | | | |
| Transit-Related | 72 | 65 | 70 | 75 | 70 | 75 |
| Transit-Oriented | 78 | 85 | 95 | 105 | 80 | 90 |
| General Locations | 101 | 105 | 105 | 105 | 100 | 100 |
| OUTER AREA | 108 | 105 | 110 | 115 | 105 | 110 |
| | | | | | | |
| East York | 98 | 100 | 105 | 110 | 110 | 100 |
| Etobicoke | 106 | 105 | 115 | 120 | 110 | 110 |
| North York | 103 | 105 | 110 | 115 | 105 | 105 |
| Scarborough | 94 | 95 | 105 | 105 | 100 | 100 |
| Toronto | 65 | 65 | 75 | 85 | 70 | 70 |
| York | 74 | 85 | 90 | 95 | 90 | 90 |

*High rentals are assumed to be a special builder's objective which he attempts to achieve in part by providing parking facilities consistent with such an objective regardless of any municipal standard which may require less parking to be provided.

(b) Measurable Variables

Existing apartment parking standards in use in all metropolitan municipalities are universally predicated on the average apartment unit as a variable expressing the need for parking space, even in those municipalities which control density by controlling floor space exclusively and without regard for density measured in terms of units per acre. The application to new apartment proposals of the Metropolitan Apartment Development Control Policy recommended by the Metropolitan Toronto Planning Board is gradually making more municipalities aware of the empirical relationships between floor space and unit density which provide a more reasonable basis for density control than either of these measurements by itself, and it seems not unreasonable to anticipate that these municipalities would similarly come to accept a parking policy which takes into account the empirical relationships between unit type and car ownership which provide the most exact model for predicting the need for tenant parking spaces.

Whether or not it is necessary for a municipality to involve itself in the complex administrative and enforcement procedures required by a parking policy based on unit type is, however, debatable. This study has shown that the "average unit type" of a building within a given geographic area is almost as sound a basis for estimating the tenant parking demand generated by that building as would be a parking demand estimated for each unit separately on the basis of the different demand of each different unit type. For example, recorded car ownership (tenant parking demand) in the apartment building sample taken for this study from North York was compared with the car ownership predicted for each building in the sample on the basis first of actual unit type and second of "average" unit type. No major

difference was found in the effectiveness with which each technique predicts actual conditions of car ownership. Therefore, although it must still be said that the best model for predicting tenant parking demand is one based on actual unit type, it can also be said that, for the example quoted, "average" unit type predicts the same result within a reasonable confidence level of $\pm 10\%$.

As has been noted, differences in car ownership or tenant parking demand (considered as a function of either actual unit type or "average" unit) reflect to a large extent differences in household size particularly the number of adults. It was also shown in the Metropolitan Toronto Planning Board's Apartment Distribution and Density Study that population density correlated as well with floor space as with unit or room densities. It may be possible, therefore, to find an empirical relationship between floor space and tenant parking demand to facilitate further the formulation of parking policy.

It sometimes happens that the original plans of an apartment building are changed to convert, for example, ten 2-bedroom units to thirteen 1-bedroom units or seven 1-bedroom and nine bachelor units. Each alternative will occupy approximately the same gross floor space. If the parking space required to be provided is based on the amount of floor space provided, there would be no change in the parking requirement as a result of conversion of the building. The same would be true if the required parking was based on the actual unit types provided because each unit type has a different parking demand. If, however, the parking requirement was based on the "average" unit type, the increase in the total number of units would require additional parking to be provided.

Similar levels of confidence in predicting car ownership or tenant parking demand can be reached on the basis of either "average unit type" or of average gross floor space per unit.

Average unit floor space appears to reflect adequately observed variations in car ownership not only within individual buildings but also between geographic areas. A parking standard based on floor space would be considerably simpler than one derived from unit type because there would be less variability within a given geographic area. For example, if a standard of 1 parking space per 1,200 square feet of floor area were required in the City of Toronto, it might adequately account for the differences in tenant parking demand produced by the average unit floor space characteristic of apartment development in different parts of that municipality as shown in the following Table:

| Location | Anticipated Average Unit Floor Space (square feet) | Probable Parking Demand per 100 units (@ 1 space per 1,200 square feet) |
|-------------------|--|---|
| Central Area | 770 | 64 |
| Inner Area | 900 | 75 |
| Intermediate Area | 1,000 | 83 |

Differences in floor space per unit within any geographic area which affect car ownership and tenant parking demand can also be accommodated by a parking formula of one space per 1,200 square feet of floor area. For example, in transit-related sites of the City of Toronto,

| Average Unit Floor Space | Probable Parking Demand |
|--------------------------|--|
| 1,000 sq. ft. | 83% (e.g. Yonge-St.Clair high rental area) |
| 775 sq. ft. | 65% (e.g. Broadview-Danforth moderate rental area) |

For other municipalities in Metropolitan Toronto, the apparent relationship between tenant parking demand and floor space is shown below:

| | |
|------------------------|---------------------------|
| East York, Scarborough | 1 space per 1,050 sq. ft. |
| York, North York | 1 space per 1,100 sq. ft. |
| Etobicoke | 1 space per 1,180 sq. ft. |

(c) Estimated Increases in Car Ownership

In the formulation of apartment parking policy, attempts are frequently made to require a building to provide sufficient parking to accommodate possible increases in car ownership and thereby avoid parking deficiencies in the future. These attempts are rarely successful because so little has been known about the specific requirements of apartment development, about the extent to which supply adjusts to demand throughout the entire existing apartment stock, or to what extent a new trend in demand is accommodated by new development. Periodically, prevailing standards are reviewed, usually emphasizing the experience of newer buildings. Frequently the conclusions drawn from such reviews for revising parking policy are partially or wholly ignored because they appear to be too far out of line with current needs. Nevertheless, the effect of a rising standard of living on car ownership and therefore on off-street parking requirements should not be dismissed lightly in the formulation of parking policy. Population and vehicle registration data for Metropolitan Toronto over the past twenty years suggest a fairly uniform increase in car ownership. The current ratio of 0.33 cars per person is expected to have increased by 1980 to 0.36 cars per person.* If this same increase is applied to the current apartment car ownership ratios as observed in the Tenant Survey of this study, future apartment car ownership (tenant parking demand) per 100 units should approximate the amounts shown in Column 2 of the following table:

| | (1) <u>1968</u> | (2) <u>1980</u> | (3) <u>1980</u> |
|-------------------|-----------------|-----------------|-----------------|
| Central Area | 55 | 60 | 65 |
| Inner Area | | | |
| Transit Related | 67 | 73 | 71 |
| Transit Oriented | 68 | 96 | 93 |
| Intermediate Area | | | |
| Transit Related | 72 | 78 | 70 |
| Transit Oriented | 78 | 85 | 93 |
| General | 101 | 109 | 114 |
| Outer Area | 108 | 115 | 114 |

*Metropolitan Toronto Planning Board 1995 car ownership projection

The 1980 tenant parking demand estimated in Column 2 is generally consistent with the demand estimated by adjusting observed average car ownership to account for variations between buildings as suggested earlier in this report. Such an adjustment allows not only for varying levels of current ownership but also for the interplay of supply and demand for parking throughout the building stock at a later date.

If tenant parking demand is estimated on the basis of the median demand observed in the Building Survey, Column 3 of the above table shows that there would be relatively little difference from the estimate of demand shown in Column 2.

While these estimates account generally for increasing car ownership, they do not account for increases in car ownership directly attributable to increases in household size (although changing household structure may well be one of several expressions of the trend to a higher standard of living). Since increased household size is itself a factor influencing car ownership, a parking policy based on the requirements of the "average" apartment unit would probably not adequately provide for the greater parking demand of the larger households even if a general increase in car ownership were taken into account. The average apartment unit had slightly more rooms in 1967 than in 1961 in most metropolitan municipalities outside the City of Toronto mainly because more 2 and 3-bedroom units were built after 1961. The trend to larger units could become more dominant if the supply of moderately-priced houses is short and families are forced to seek apartment accommodation notwithstanding some municipalities' attempts to restrict the development of large units. Previous housing and population forecasts, however, have not foreseen any widespread increase in apartment size, and it would be highly speculative to do so at the present time. Such increases as have taken place have a decided distributional bias which is adequately reflected in the concept of the present study.

(d) Tenant Parking Policy Considerations

The car ownership (tenant parking demand) of the "average" unit has been shown to vary by the geographic location of the apartment building and the availability of public transit. These variables might be significant enough to warrant non-uniform parking policies both intramunicipally and intermunicipally.

In Toronto for example, different standards could be adopted for the Central Area in which the highest apartment densities are permitted, for transit-related sites outside the Central Area where Zone 4 density (plus bonus) is generally permitted, and for all other locations where Zone 3 density and Zone 4 density without bonus are often permitted.

The new proposed York Official Plan is generally consistent with the Metropolitan Apartment Development Control Policy with respect to density. Apartment projects are for the most part approved on their individual merits providing good opportunity for relating parking requirements to type-location.

In East York, some apartment developments appear to be considered in the context of the comprehensive zoning by-law and others in accordance with district plan policy. In order to relate parking to type-location properly, it is probable that the borough would have to restate its parking policy.

Existing parking standards in Etobicoke appear to be adequate to meet the parking demand observed in this study if the borough would clarify its requirements for visitors' parking, but lower standards might be considered for redevelopment in transit-related locations and along Lakeshore Boulevard. A similar consideration would be valid in North York especially

in the Willowdale redevelopment area on the Yonge subway and possibly also in the Yonge-Bathurst corridor south of Wilson Avenue.

In Scarborough, the Oakridge high density redevelopment area is quite limited, but on the basis of the observations of this survey, the parking demand in this area will probably be lower than that of other areas in the outer boroughs.

The tenant parking requirements suggested by these observations are shown in the table on page 37.

(e) Visitors' Parking Policy Considerations

As noted above, the peak accumulated demand for visitors' parking in Metropolitan Toronto varies from 10 to $16\frac{1}{2}$ cars per 100 units and generally is only about half-satisfied on-site. The deficiency is partly attributable to an inadequate number of visitors' parking spaces being provided, particularly in the "Central" and "Outer" areas, but there are a variety of other causes contributing to it, notably the cost of indoor tenant parking and tenants' demands for outdoor visitors' spaces to be made available for their own use, inadequate tenant parking preempting visitors' spaces for tenant use, inaccessible or badly-marked and poorly-managed visitor parking areas, and lack of adequate landlord control over the use of visitors' parking spaces.

Serious visitors' parking deficiencies in future apartment development could probably best be precluded, however, if the local municipalities, in framing comprehensive zoning requirements and site plan by-laws which permit apartment development, would differentiate between tenant and visitor parking, and specify the amount and location required for each.

On the basis of this study's surveys of visitor, parking demand, it would appear that $12\frac{1}{2}$ spaces per 100 units would satisfy the peak accumulated demand everywhere in Metropolitan Toronto except the Central Area as defined in the Metropolitan Apartment Development Control Policy where $16\frac{1}{2}\%$ would be required to meet this demand.

PARKING STANDARDS SUGGESTED BY STUDY

| LOCATION (i) Tenant Parking (ii) Visitor Parking | PARKING REQUIREMENTS CALCULATED BY: | | | | | | | | | | | | (1) Unit Variable (spaces per 100 units) | | (2) Floor Space Variable (floor space per parking space) | |
|--|---------------------------------------|--|-------|--------------------|------|--|------|-------|------|----------------------|-------|-----|--|-----|--|--|
| | Existing Municipal Requirements | Standards Applicable to Municipality As a Unit | | | | Standards Applicable to Type-Location Within Municipality | | | | Transit- Oriented | Other | | | | | |
| | | Central | | Transit Related | | Transit Oriented | | Other | | | | | | | | |
| | | (1) | (2) | (1) | (2) | (1) | (2) | | (1) | | | (2) | | | | |
| East York (i) 100* (ii) | (1) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | |
| | | 100 | 1050 | 80 | 1120 | 90 | 1000 | 100 | 1050 | 100 | 1050 | 100 | 1050 | 100 | 1050 | |
| | | 12½ | 8200 | 12½ | 7200 | 12½ | 8000 | 12½ | 8000 | 12½ | 8200 | 12½ | 8200 | 12½ | 8200 | |
| Etobicoke (i) 125 (ii) | (1) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | |
| | | 110 | 1180 | 90 | 1110 | 90 | 1000 | 110 | 1180 | 110 | 1180 | 110 | 1180 | 110 | 1180 | |
| | | 12½ | 10400 | 12½ | 8000 | 12½ | 7200 | 12½ | 7200 | 12½ | 10400 | 12½ | 10400 | 12½ | 10400 | |
| North York (i) 100 + 12½ (ii) | (1) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | |
| | | 105 | 1100 | 90 | 1110 | 90 | 1000 | 110 | 1090 | 110 | 1090 | 110 | 1090 | 110 | 1090 | |
| | | 12½ | 9200 | 12½ | 8000 | 12½ | 7200 | 12½ | 7200 | 12½ | 9600 | 12½ | 9600 | 12½ | 9600 | |
| Scarborough (i) 100 + 12½ (ii) | (1) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | |
| | | 100 | 1050 | 80 | 1060 | 105 | 1050 | 105 | 1050 | 105 | 1050 | 105 | 1050 | 105 | 1050 | |
| | | 12½ | 8200 | 12½ | 6800 | 12½ | 7600 | 12½ | 7600 | 12½ | 8200 | 12½ | 8200 | 12½ | 8200 | |
| Toronto (i) 100 (75**) } (ii) 25 (25**) } | (1) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | |
| | | 70 | 1140 | 65 | 1150 | 90 | 1050 | 100 | 1050 | 100 | 1050 | 100 | 1050 | 100 | 1050 | |
| | | 12½ | 6400 | 16½ | 7920 | 12½ | 7600 | 12½ | 7600 | 12½ | 8000 | 12½ | 8000 | 12½ | 8000 | |
| York (i) 100 (ii) 12½ | (1) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | |
| | | 90 | 1100 | 80 | 1120 | 90 | 1100 | 100 | 1100 | 100 | 1100 | 100 | 1100 | 100 | 1100 | |
| | | 12½ | 8000 | 12½ | 7200 | 12½ | 8000 | 12½ | 8000 | 12½ | 8000 | 12½ | 8000 | 12½ | 8000 | |

*As required by comprehensive zoning by-law, sometimes varied in individual site plan by-laws.
 **Proposed revision to comprehensive zoning by-law.

VII SUMMARY OF MAIN FINDINGS

1. Survey data indicate that the ratio of parking spaces to units actually provided in apartments erected 1961-67 is somewhat less than would have been expected under municipal policies in force during most of this time period, indicating particularly that exceptions to policy standards are allowed, but also suggesting that some problems may exist with regard to strict enforcement of standards.
2. The fact that many buildings are developed with parking ratios in excess of policy standards gives added emphasis to the above disparity, while also indicating that some developers respond to market demand, particularly in higher rental apartments, irrespective of policy standards.
3. There are indications in the survey that policies leading to a very high proportion of underground parking may increase tenant parking costs, and tend to make visitor parking more inaccessible.
4. The greatest challenge to workable policy standards involves the provision and effective utilization of parking for visitors. Deficiencies in existing buildings are highlighted in both the Building Survey and the Tenant Survey of this study, and although the final responsibility must rest with the developer, municipal policies should be clarified with respect to the number of spaces to be designated and maintained for visitors and the location of such spaces for optimum accessibility. The surveys indicate a need for one visitor parking space per 6-8 apartment units.
5. Based on data of tenant demand and the utilization of parking facilities in existing buildings, it would appear

that certain municipal standards are unrealistic. Most notably, the requirement for 125% parking in Toronto is high in relation to observed levels of car ownership, and the disparity is much more obvious than in other municipalities. At the other extreme, the surveys indicate the need for higher standards to meet car ownerships ratios exceeding 100 in the outer boroughs, now most obvious in North York but probably becoming more evident in Scarborough as rental values increase in that municipality. Etobicoke does not appear to have experienced any major problems to date, but the developer's practice of providing more parking than required by municipal policy may become less prevalent under new density policies now coming into force.

6. The element of variability inherent in survey data clearly limits the role of policy to a definition of minimum rather than optimum requirements for all buildings. Parking standards should attempt to strike a balance between supply and the varying levels of demand likely to be experienced, and may rely on adjustments in demand taking place within the apartment stock through market processes and over a period of time.
7. The surveys indicate that consideration could be given to different standards for different type-locations within any one municipality.
8. Consideration could also be given to alternative methods of stating the policy standard where this can be seen to simplify administrative procedures. As an alternative to parking standards based on the average unit in a building, floor space could be used either as a factor equivalent to the average unit, or as a variable which would help to account for different car ownership ratios

between (geographic and transit) areas within the municipality and, to a lesser extent, between buildings in the same area.

9. Increases in car ownership are unlikely to create a material increase in the demand for tenant parking in existing apartment buildings. As buildings age, the conversion of large units to smaller units, their attraction for households with lower incomes and paying lower rents, improvements in public transportation and similar characteristics which appear to lower parking demand may be expected to offset any general increase in car ownership and make the parking provided when the building was new adequate for foreseeable periods of time.

FW/lm
December 17, 1968

TABLE 1

TYPE OF APARTMENT UNIT

| | Total | Bachelor | TYPE OF UNIT | | | Total | Three Bedrooms | | | |
|-----------------------|--------|----------|----------------|-----------------|-------------------|-------|-------------------|-------|-------|-------|
| | | | One Bedroom | Two Bedrooms | Three Bedrooms | | | | | |
| TOTAL NUMBER OF UNITS | 57,755 | 100% | 3,389 | 5.8% | 23,830 | 41.3% | 24,447 | 42.3% | 6,089 | 10.5% |
| CENTRAL AREA | 5,474 | 100% | 1,004 | 18.3% | 3,193 | 58.3% | 1,261 | 23.0% | 16 | 0.3% |
| INNER AREA | 8,108 | 100% | 1,117 | 13.8% | 4,161 | 51.3% | 2,494 | 30.7% | 336 | 4.1% |
| INTERMEDIATE AREA | 13,379 | 100% | 1,062 | 7.9% | 6,369 | 47.6% | 5,246 | 39.2% | 702 | 5.2% |
| OUTER AREA | 30,794 | 100% | 206 | 0.7% | 10,107 | 32.8% | 15,446 | 50.1% | 5,035 | 16.3% |

TABLE 2

PARKING RATIOS PROVIDED IN APARTMENT BUILDINGS ERECTED 1961 - 67 (BUILDING SURVEY)

[illegible]

TABLE 3

GROUPING OF BUILDINGS BY RATIOS OF PARKING PROVIDED (BUILDING SURVEY)

| MUNICIPALITY | PERCENTAGE OF BUILDINGS SURVEYED PROVIDING PARKING | | | |
|--------------|--|------------------------|-----------------------|-----------------------------|
| | At Ratios Less Than 100% | At Ratios 100-112½% | At Ratios 113-125% | At Ratios More Than 125% |
| TORONTO | 12.6 | 25.2 | 46.6 | 15.5 |
| YORK | --- | 61.1 | 38.8 | --- |
| EAST YORK | 9.5 | 47.6 | 33.3 | 9.5 |
| WILLOWDALE | --- | 12.8 | 36.0 | 51.2 |
| NORTH YORK | 6.2 | 30.0 | 45.6 | 18.1 |
| SCARBOROUGH | 7.0 | 58.7 | 14.3 | 19.0 |

TABLE 4

PROVISION OF VISITOR PARKING AT APARTMENTS (BUILDING SURVEY)

| MUNICIPALITY | Ratio of Visitor Parking Spaces Per 100 Units In Buildings Erected | | | Percentage of Buildings Reporting No Visitor Parking | | |
|--------------|--|---------|---------|--|---------|---------|
| | 1961-64 | 1964-67 | 1961-67 | 1961-64 | 1964-67 | 1961-67 |
| TORONTO | 11.8 | 11.1 | 11.4 | 38.8 | 15.3 | 29.0 |
| YORK | 13.7 | 10.7 | 11.7 | 28.5 | 14.2 | 21.4 |
| EAST YORK | 2.3 | 8.3 | 7.0 | 80.0 | 22.2 | 42.8 |
| ETOBICOKE | 14.8 | 19.0 | 16.8 | 24.3 | 7.4 | 17.6 |
| NORTH YORK | 7.4 | 9.3 | 8.5 | 44.2 | 16.9 | 31.7 |
| SCARBOROUGH | 3.1 | 5.7 | 4.8 | 73.3 | 33.3 | 53.3 |

TABLE 5

LOCATION OF PARKING FOR TENANT VEHICLES (TENANT SURVEY)

| GEOGRAPHIC AREA | PERCENTAGE OF TENANT VEHICLES LOCATED | | | | | | | |
|-----------------------|---------------------------------------|--------|---------|--------------|-------------|--------|-------|-------|
| | On Premises | | | Off Premises | | | | TOTAL |
| | Total | Inside | Outside | Street | Private Lot | Garage | Other | |
| CENTRAL | 95.5 | 87.0 | 8.5 | 2.8 | 0.5 | 1.2 | -- | 4.5 |
| INNER | 97.7 | 86.6 | 11.1 | 1.5 | --- | 0.8 | -- | 2.3 |
| INTERMEDIATE | 97.7 | 71.7 | 26.0 | 0.8 | 1.4 | -- | 0.1 | 2.3 |
| OUTER | 96.6 | 50.2 | 46.4 | 0.7 | 2.4 | 0.2 | 0.1 | 3.4 |
| TOTAL AREA | 96.9 | 61.0 | 35.9 | 0.9 | 1.8 | 0.3 | 0.1 | 3.1 |
| <u>MUNICIPALITIES</u> | | | | | | | | |
| TORONTO | 97.7 | 85.9 | 11.8 | 1.4 | 0.1 | 0.8 | -- | 2.3 |
| YORK | 95.6 | 77.2 | 18.4 | 2.8 | 1.6 | -- | -- | 4.4 |
| EAST YORK | 99.8 | 73.4 | 26.4 | -- | -- | -- | 0.2 | 0.2 |
| ETOBICOKE | 96.0 | 51.6 | 44.4 | 1.5 | 2.5 | -- | -- | 4.0 |
| NORTH YORK | 96.8 | 57.8 | 39.0 | -- | 2.9 | 0.3 | -- | 3.2 |
| SCARBOROUGH | 95.6 | 33.6 | 62.0 | 1.7 | 2.2 | -- | 0.5 | 4.4 |

TABLE 6

USE OF AVAILABLE PARKING BY TENANTS (BUILDING SURVEY)

| MUNICIPALITY | % Of Available Parking Used (Rented) By Tenants | | | % of Available Parking For Visitors | % of Available Parking Rented To "Others" ** | Total % of Avail. Parking "Used" |
|--------------|--|-------------------|------------------|---|--|---|
| | Outdoor Parking | Indoor Parking | Total Parking | | | |
| TORONTO | 30.5 | 62.4 | 57.1 | 10.2 | 3.3 | 70.6 |
| YORK | 58.6 | 74.9 | 71.9 | 10.5 | 1.3 | 83.7 |
| EAST YORK | 66.9 | 94.1 | 89.2 | 6.4 | | 95.6 |
| ETOBICOKE | 75.5 | 91.3 | 87.5 | 12.4 | | 84.9 |
| NORTH YORK | 82.7 | 84.4 | 83.7 | 7.2 | | 90.9 |
| SCARBOROUGH | 88.1 | 80.8 | 85.1 | 4.5 | | 89.6 |

* Ratios in Table 4 converted to percent Total parking

** Reported as rented to persons not living on the premises

TABLE 7

UNUSED PARKING FACILITIES AT APARTMENTS (BUILDING SURVEY)

| MUNICIPALITY | Ratio of Parking Spaces Unused By Tenants per 100 Units | | | Ratio of Visitor Parking Spaces Per 100 Units | Overall Ratio of "Unused" Parking Spaces Per 100 Units |
|--------------|--|-------------------|--------------------|---|---|
| | Total Parking | Indoor Parking | Outdoor Parking | | |
| TORONTO | 47.7 | 34.8 | 12.9 | 11.4 | 36.3 |
| YORK | 31.1 | 24.1 | 7.0 | 11.7 | 19.4 |
| EAST YORK | 11.8 | 5.4 | 6.4 | 7.0 | 4.8 |
| ETOBICOKE | 23.7 | 5.4 | 18.3 | 16.8 | 6.9 |
| NORTH YORK | 19.2 | 11.4 | 7.8 | 8.5 | 10.7 |
| SCARBOROUGH | 15.7 | 8.3 | 7.2 | 4.8 | 10.9 |

TABLE 8

AVERAGE CAR OWNERSHIP RATIOS AT APARTMENTS
BY MUNICIPALITY AND GEOGRAPHIC AREA (TENANT SURVEY)

| GEOGRAPHIC AREA | Average Number of Vehicles Owned (Or Leased) Per 100 Apartment Units by Type of Apartment Unit | | | | |
|-----------------------|---|----------------|----------------|-----------------------------|-----------|
| | Bachelor | One Bedroom | Two Bedroom | Three Bedroom Or Larger* | All Types |
| CENTRAL | 23 | 58 | 71 | 100** | 55 |
| INNER | 46 | 62 | 95 | 128 | 73 |
| Transit-Related | 43 | 58 | 94 | 134 | 67 |
| Transit-Oriented | 60 | 65 | 106 | 126 | 88 |
| INTERMEDIATE | 49 | 76 | 89 | 136 | 82 |
| Transit-Related | 56 | 75 | 72 | --- | 72 |
| Transit-Oriented | 51 | 72 | 84 | 136 | 78 |
| General | 36 | 105 | 97 | 130 | 101 |
| OUTER | 60** | 97 | 107 | 138 | 108 |
| TOTAL AREA | 41 | 80 | 100 | 137 | 92 |
| <u>MUNICIPALITIES</u> | | | | | |
| TORONTO | 42 | 61 | 81 | 131 | 65 |
| YORK | -- | 73 | 82 | 109 | 74 |
| EAST YORK | 45 | 86 | 102 | 139 | 98 |
| ETOBICOKE | 18 | 96 | 108 | 139 | 106 |
| NORTH YORK | 48 | 92 | 102 | 131 | 103 |
| SCARBOROUGH | 81* | 84 | 95 | 94 | 94 |

* All columns headed Three Bedroom also include units with more than three

** Ratios obtained from very small samples (see Table 9)

TABLE 9

SAMPLING VARIABILITY OF CAR OWNERSHIP RATIOS
(TENANT SURVEY)

| GEOGRAPHIC AREA | Average Car Ownership Ratios By Unit Type With Estimated Deviations Associated with Sampling | | | | |
|-----------------|---|----------------|----------------|------------------|-------------|
| | Bachelor | One Bedroom | Two Bedroom | Three Bedroom | All Types |
| CENTRAL | 23 \pm 12 | 58 \pm 1 | 71 \pm 19 | 100 \pm 100* | 55 \pm 1 |
| INNER | 46 \pm 10 | 62 \pm 13 | 95 \pm 8 | 128 \pm 9 | 73 \pm 11 |
| INTERMEDIATE | 49 \pm 3 | 76 \pm 16 | 89 \pm 13 | 136 \pm 21 | 82 \pm 12 |
| OUTER | 60 \pm 50* | 97 \pm 15 | 107 \pm 8 | 138 \pm 8 | 108 \pm 1 |
| TOTAL AREA | 41 \pm 8 | 80 \pm 10 | 100 \pm 2 | 137 \pm 4 | 92 \pm 4 |

* high variance due to small samples

TABLE 10

AVERAGE CAR OWNERSHIP PER PERSON (TENANT SURVEY)

| GEOGRAPHIC AREA | Ratio of Cars (1) Per 100 Persons (2) Per 100 Adult Persons BY TYPE OF APARTMENT UNIT | | | | | | | | | |
|--------------------|--|-----|----------------|-----|----------------|-----|------------------|-----|-----------|-----|
| | Bachelor | | One Bedroom | | Two Bedroom | | Three Bedroom | | All Types | |
| | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) |
| CENTRAL | 20 | 20 | 32 | 33 | 27 | 30 | 50 | 50 | 30 | 31 |
| INNER | 43 | 43 | 38 | 39 | 41 | 43 | 46 | 52 | 40 | 42 |
| INTERMEDIATE | 40 | 41 | 41 | 43 | 33 | 41 | 42 | 56 | 37 | 43 |
| OUTER | 50 | 66 | 50 | 54 | 36 | 52 | 33 | 55 | 38 | 53 |

TABLE 11

AVERAGE CAR OWNERSHIP BY TOTAL HOUSEHOLD INCOME
(TENANT SURVEY)

| TOTAL HOUSEHOLD INCOME PER ANNUM \$ | RATIO OF CARS OWNED PER 100 APARTMENT UNITS BY GEOGRAPHIC AREA | | | | |
|--|---|-------|--------------|-------|------------|
| | Central | Inner | Intermediate | Outer | Total Area |
| Under 4,000 | 47 | 12 | 21 | 52 | 34 |
| 4,000 - 5,999 | 20 | 40 | 55 | 142 | 91 |
| 6,000 - 7,999 | 41 | 47 | 81 | 97 | 78 |
| 8,000 - 9,999 | 55 | 75 | 90 | 107 | 93 |
| 10,000 - 11,999 | 58 | 79 | 110 | 108 | 99 |
| 12,000 - 13,999 | 94 | 89 | 87 | 142 | 123 |
| Over 14,000 | 86 | 129 | 106 | 139 | 120 |
| Over 8,000 | 67 | 98 | 106 | 125 | 112 |
| Under 8,000 | 29 | 40 | 59 | 84 | 72 |
| About 8,000 | 106 | 80 | 75 | 101 | 93 |
| Income Not Stated | 51 | 58 | 70 | 100 | 83 |
| Student | 26 | 100 | -- | --- | 24 |
| ALL HOUSEHOLDS | 55 | 73 | 82 | 108 | 92 |

TABLE 12

AVERAGE HOUSEHOLD INCOME AT APARTMENTS (TENANT SURVEY)

| GEOGRAPHIC AREA | AVERAGE ANNUAL INCOME BY TYPE OF APARTMENT | | | | |
|--------------------|--|----------------------|----------------------|------------------------|-----------------|
| | Bachelor \$ | One Bedroom \$ | Two Bedroom \$ | Three Bedroom \$ | All Types \$ |
| CENTRAL | 7,200 | 9,480 | 12,100 | ---- | 9,600 |
| INNER | 6,720 | 8,960 | 11,320 | 13,340 | 9,280 |
| INTERMEDIATE | 7,440 | 8,900 | 9,460 | 13,080 | 9,180 |
| OUTER | 5,860 | 9,180 | 8,900 | 10,100 | 9,100 |
| TOTAL AREA | 7,000 | 9,120 | 9,440 | 10,660 | 9,200 |

TABLE 13

AVERAGE RENTALS AT APARTMENTS (TENANT SURVEY)

| GEOGRAPHIC AREA | AVERAGE MONTHLY RENTAL* BY TYPE OF APARTMENT | | | | |
|--------------------|--|----------------------|----------------------|------------------------|-----------------|
| | Bachelor \$ | One Bedroom \$ | Two Bedroom \$ | Three Bedroom \$ | All Types \$ |
| CENTRAL | 125 | 151 | 193 | 250 | 156 |
| INNER | 123 | 153 | 189 | 260 | 167 |
| INTERMEDIATE | 116 | 137 | 163 | 199 | 149 |
| OUTER | 117 | 136 | 151 | 169 | 149 |
| TOTAL AREA | 121 | 141 | 160 | 178 | 152 |

*Rental excluding parking costs

TABLE 14

ASSUMED RATIOS OF CAR OWNERSHIP BY BUILDING SURVEY

| RATIO OF CARS* PER 100 APARTMENT UNITS | | | |
|--|-------------|----------------|-----------------------------|
| MUNICIPALITY | 1968 Survey | 1961 Survey | |
| | | Overall Survey | Newer Development (1954-61) |
| TORONTO | 63 | 55 | 67 |
| YORK | 80 | 57 | 71 |
| EAST YORK | 97 | 72 | 79 |
| ETOBICOKE | 112 | 80 | 98 |
| NORTH YORK | 99 | 84 | 94 |
| SCARBOROUGH | 90 | 83 | 90 |
| TOTAL AREA | 88 | 70 | 76 |

*Actually surveyed as parking spaces rented to tenants

TABLE 15

COMPARISON OF CAR OWNERSHIP RATIOS
FROM BUILDING AND TENANT SURVEYS

| GEOGRAPHIC AREA | RATIO OF TENANT CARS PER 100 APARTMENT UNITS | |
|-----------------------|--|-----------------|
| | Tenant Survey | Building Survey |
| CENTRAL | 55 | 57 |
| INNER | 73 | 71 |
| Transit-Related | 67 | 67 |
| Transit-Oriented | 88 | 80 |
| INTERMEDIATE | 82 | 79 |
| Transit-Related | 72 | 64 |
| Transit-Oriented | 78 | 75 |
| General | 101 | 101 |
| OUTER | 108 | 103 |
| TOTAL AREA | 92 | 88 |
| <u>MUNICIPALITIES</u> | | |
| TORONTO | 65 | 63 |
| YORK | 74 | 80 |
| EAST YORK | 98 | 97 |
| ETOBICOKE | 106 | 112 |
| NORTH YORK | 103 | 99 |
| SCARBOROUGH | 94 | 90 |

TABLE 16

VARIABILITY OF CAR OWNERSHIP RATIOS IN
INDIVIDUAL BUILDINGS

| MUNICIPALITY | NUMBER OF BUILDINGS BY RATIO OF TENANT CARS PER 100 APARTMENT UNITS | | | | | | | | |
|------------------|--|-------|-------------------------|----------------|------------------------|-------|-------------------------|-----------------|-----|
| | 50 | 50-59 | 60-69 | 70-79 | 80-89 | 90-99 | 100-109 | 110-119 | 120 |
| TORONTO | 20 | 13 | <u>23</u> ^{**} | 15 | 7 | 4 | 5 | 3 | 1 |
| YORK | 2 | 1 | - | 1 | <u>5</u> [*] | 4 | 1 | | |
| EAST YORK | 1 | 2 | - | - | 2 | 2 | <u>5</u> ^{**} | 1 | 1 |
| ETOBICOKE | - | - | - | 2 | 6 | 10 | <u>22</u> ^{**} | 12 [*] | 10 |
| NORTH YORK | - | 2 | 3 | 7 | 12 | 17 | <u>40</u> ^{**} | 24 | 6 |
| SCARBOROUGH | - | - | - | 3 | 6 | 9 | <u>10</u> | 2 | - |
| GEOGRAPHIC AREA | | | | | | | | | |
| CENTRAL | 2 | 6 | 2 | 6 | | | | | |
| INNER | 3 | 5 | <u>11</u> | 5 [*] | 7 | 5 | 5 | 2 | |
| Transit-Related | 2 | 3 | <u>9</u> ^{**} | 3 | 4 | 4 | 2 | 1 | |
| Transit-Oriented | 1 | 2 | 2 | 2 | <u>3</u> ^{**} | 1 | 3 | 1 | |
| INTERMEDIATE | 11 | 6 | 4 | 8 [*] | 9 ^{**} | 8 | <u>14</u> | 7 | 1 |
| Transit-Related | - | 2 | 2 ^{**} | <u>3</u> | - | - | - | - | - |
| Transit-Oriented | 11 | 4 | 2 | 5 [*] | 8 ^{**} | 6 | 3 [*] | 5 | 1 |
| General | - | - | | | 1 | 2 | <u>11</u> ^{**} | 2 | - |
| OUTER | - | 1 | 2 | 9 | 22 | 33 | <u>64</u> ^{**} | 33 | 17 |

*Mean

**Median

Mode

TABLE 17
DEMAND FOR VISITOR PARKING
PEAK ACCUMULATION OF VISITOR CARS

| GEOGRAPHIC AREA | Day of Week | Ratio of Vehicles Per 100 Units | Time of Peak (All P.M.) | Period with Over 10% Ratio (All P.M.) |
|-----------------|-------------|---------------------------------|-------------------------|---------------------------------------|
| CENTRAL | FRI. | 10.6 | 9.00 | 7.46 - 10.30 |
| | SAT. | <u>16.5</u> | 8.30 | 6.46 - 11.45 |
| | SUN. | 12.9 | 7.30 | 2.46 - 9.30 |
| INNER | FRI. | 8.5 | 8.30 | - |
| | SAT. | <u>11.6</u> | 9.30 | 7.46 - 10.00 |
| | SUN. | 9.7 | 6.30 | - |
| INTERMEDIATE | FRI. | 4.5 | 9.30 | - |
| | SAT. | <u>10.0</u> | 8.30 | 8.16 - 9.30 |
| | SUN. | 5.5 | 7.30 | - |
| OUTER | FRI. | 6.9 | 9.00 | - |
| | SAT. | <u>12.5</u> | 8.30 | 7.46 - 10.45 |
| | SUN. | 12.0 | 4.00 | 2.46 - 7.30 |

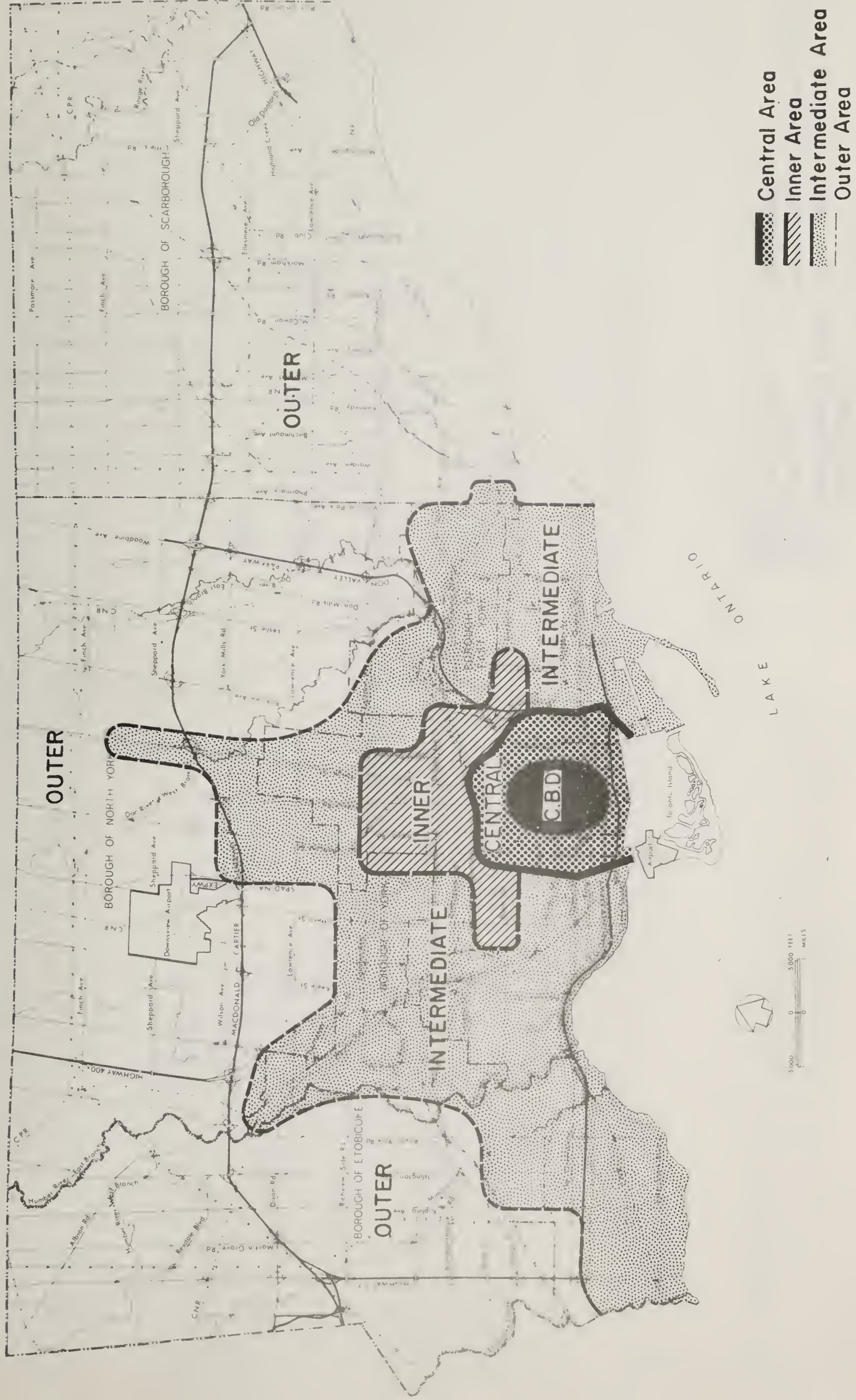
Estimated sampling variability of peak (accumulated) visitor parking ratios

| | | | |
|--------------|------|---|-----|
| Central Area | 16.5 | ± | 1.1 |
| Inner Area | 11.6 | ± | 1.2 |
| Intermediate | 10.0 | ± | 0.8 |
| Outer | 12.5 | ± | 0.6 |








TABLE 18

LOCATION OF VISITOR CARS

| GEOGRAPHIC AREA | PERCENTAGE OF VISITOR CARS PARKED ON | | | |
|--------------------|--------------------------------------|------------------|-------------------|-------------------|
| | Premises Visited | Nearby Street | Nearby Parking | Other Location |
| CENTRAL | 40.4 | 52.8 | 5.4 | 1.4 |
| INNER | 55.9 | 42.2 | 1.3 | 0.6 |
| INTERMEDIATE | 55.3 | 42.5 | 1.9 | 0.3 |
| OUTER | 43.0 | 46.9 | 8.0 | 2.1 |
| TOTAL AREA | 46.8 | 46.3 | 5.4 | 1.5 |





-  Central Area
-  Inner Area
-  Intermediate Area
-  Outer Area
-  Subway
-  Main Surface Transit
-  Main Highways

Average Car Ownership Ratios By Sub-Area - MAP 2

A SURVEY OF TRAFFIC AND PARKING
AT APARTMENTS WITHIN METROPOLITAN TORONTO

Conducted For:

The Metropolitan Toronto Planning Board,
City Hall,
Toronto, Ontario.

By:

Recon Research Consultants Limited,
86 Collier Street,
Toronto 5, Ontario.

September, 1968

68360

C O N T E N T S

| | <u>Page Number</u> |
|---------------------------------|--------------------|
| I Purpose of The Survey .. | 1 |
| II Survey Methods | 2 - 13 |
| III Analysis of Results ... | 14 |

DETAILED TABLES:

| | |
|--|-------|
| Type of Apartment Unit - Central Area | T-1A |
| - Inner Area | T-1B |
| - Intermediate Area | T-1C |
| - Outer Area | T-1D |
| Average Number of People in The Household | |
| - By Area and Type of Apartment Unit | T-2A |
| - By Area and Building Size | T-2B |
| Average Number of Males Eighteen Years and Over in The Household | |
| - By Area and Type of Apartment Unit | T-3A |
| - By Area and Building Size | T-3B |
| Average Number of Females Eighteen Years and Over in The Household | |
| - By Area and Type of Apartment Unit | T-4A |
| - By Area and Building Size | T-4B |
| Average Number of Children Under Six Years in The Household | |
| - By Area and Type of Apartment Unit | T-5A |
| - By Area and Building Size | T-5B |
| Average Number of Children Between Six and Twelve Years in The Household | |
| - By Area and Type of Apartment Unit | T-6A |
| - By Area and Building Size | T-6B |
| Average Number of Children Between Thirteen and Seventeen Years in The Household | |
| - By Area and Type of Apartment Unit | T-7A |
| - By Area and Building Size | T-7B |
| Type of Accommodation Shared Versus Family Unit | T-8 |
| Type of Accommodation by Type of Apartment Unit | |
| - Central Area | T-9A |
| - Inner Area | T-9B |
| - Intermediate Area | T-9C |
| - Outer Area | T-9D |
| Average Number of People in The Household Working Full Time | |
| - By Area and Type of Apartment Unit | T-10A |
| - By Area and Building Size | T-10B |

C O N T E N T S

Page Number

DETAILED TABLES (CONTINUED)

| | | |
|--|---|-------|
| Average Number of People in The Household Working Part Time | - By Area and Type of Apartment Unit | T-11A |
| | - By Area and Building Size | T-11B |
| Average Total Household Annual Income | - By Area and Type of Apartment Unit | T-12A |
| | - By Area and Building Size | T-12B |
| Average Total Household Annual Income by Area and Number of Residents | - Working Full Time | T-12C |
| | - Working Part Time | T-12D |
| Average Number of Vehicles Owned or Leased by Household Members | - By Area and Type of Apartment Unit | T-13A |
| | - By Area and Size of Building | T-13B |
| | - By Area and Number of Residents | T-13C |
| | - By Area and Number of Residents Working Full Time | T-13D |
| | - By Area and Number of Residents Working Part Time | T-13E |
| | - By Area and Total Household Annual Income | T-13F |
| Tenant Parking Accommodation for All Vehicles Owned or Leased by Household Members | | T-14 |
| Cost of Indoor Parking on Apartment Premises | | T-15A |
| Cost of Outdoor Parking on Apartment Premises | | T-15B |
| Average Monthly Apartment Rental | - By Area and Type of Apartment Unit | T-16A |
| | - By Area and Type of Accommodation | T-16B |
| | - By Area and Total Household Income | T-16C |
| Visitors' Weekend Parking Demand Expressed as a Cumulative Percentage of the Number of Apartment Units | - Central Area | T-17A |
| | - Inner Area | T-17B |
| | - Intermediate Area | T-17C |
| | - Outer Area | T-17D |
| Parking Arrangements for Visitors' Cars | | T-18 |
| Average Number of Weekday Morning Trips (7:00-9:00 A.M.) | - Generated by Area and Type of Apartment Unit | T-19A |
| | - Generated by Area and Size of Building | T-19B |
| | - By Area and Mode of Transportation | T-19C |
| Departure Time of Morning Weekday Trips (7:00-9:00 A.M.) | | T-19D |
| Average Number of Weekday Morning Trips (7:00-9:00 A.M.) | | T-20 |
| Average Number of Attracted Trips (7:00-9:00 A.M.) | - By Area and Type of Apartment Unit | T-21A |
| | - By Area and Size of Building | T-21B |
| Mode Used for Attracted Trips (7:00-9:00 A.M.) | | T-21C |

C O N T E N T S

| <u>DETAILED TABLES (CONTINUED)</u> | <u>Page Number</u> |
|--|--------------------|
| Average Number of Weekday Evening Trips (4:00-7:00 P.M.) | |
| - Attracted by Area and Type of Apartment Unit | T-22A |
| - Attracted by Area and Size of Building | T-22B |
| Distribution of Weekday Evening Trips (4:00-7:00 P.M.) | |
| - By Area and Mode of Transportation | T-22C |
| Arrival Time of Weekday Evening Trips (4:00-7:00 P.M.) | T-22D |
| Average Number of Generated Trips (4:00-7:00 P.M.) | |
| - By Area and Type of Apartment Unit | T-23A |
| - By Area and Size of Building | T-23B |
| Mode Used for Generated Trips (4:00-7:00 P.M.) | T-23C |
| Average Number of Vehicles Owned or Leased by Household Members by Type of Apartment Unit and Proximity To Transit | T-24A |
| Tenant Parking Accommodation For All Tenant Vehicles by Proximity to Transit | T-24B |
| Distribution of Weekday Morning Trips (7:00-9:00 A.M.) by Proximity to Transit and Mode of Transportation | T-24C |
| Average Number of Weekday Morning Trips (7:00-9:00 A.M.) Generated by Type of Unit and Proximity to Transit | T-24D |
| Distribution of Weekday Evening Trips (4:00-7:00 P.M.) by Proximity to Transit and Mode of Transportation | T-24E |
| Average Number of Weekday Evening Trips (4:00-7:00 P.M.) by Type of Unit and Proximity to Transit | T-24F |
| Average Number of Vehicles Owned or Leased by Household Members by Type of Apartment and Borough | T-25A |
| Tenant Parking Accommodation for All Tenant Vehicles by Borough | T-25B |
| Distribution of Weekday Morning Trips (7:00-9:00 A.M.) by Borough and Mode of Transportation | T-25C |
| Average Number of Weekday Morning Trips (7:00-9:00 A.M.) Generated by Type of Unit and Borough | T-25D |
| Distribution of Weekday Evening Trips (4:00-7:00 P.M.) by Borough and Mode of Transportation | T-25E |
| Average Number of Weekday Evening Trips (4:00-7:00 P.M.) by Type of Unit and Borough | T-25F |
| Tenant Parking Requirements by Size of Building | |
| - Central Area | T-26A |
| - Inner Area | T-26B |
| - Intermediate Area | T-26C |
| - Outer Area | T-26D |

APPENDIX:

Estimates of Sampling Variability
Map of Geographical Areas
Introductory Letter
Questionnaire

A SURVEY OF TRAFFIC AND PARKING
AT APARTMENTS WITHIN METROPOLITAN TORONTO

I Purpose of The Survey ...

This survey was undertaken to determine tenant and visitor parking requirements at apartment buildings within Metropolitan Toronto, and the variation in these requirements by such variables as geographical area and proximity to transit, size of building, type of apartment unit, family income, etc. A secondary purpose was to examine the traffic generation and attraction rates of these buildings during the morning and evening peak periods.

II Survey Methods ...

1. Introduction:

This survey was designed as a telephone survey of apartment tenants, and was a continuation of an earlier survey completed in January, 1968 (see "A Pilot Survey of Traffic and Parking at Apartments" Recon Research Consultants Limited).

The original survey consisted of an inventory of those apartment buildings constructed within Metropolitan Toronto between May, 1961 and April, 1967, together with a pilot survey of approximately two hundred apartment tenants. A list of the addresses of all such buildings was provided by the Metropolitan Toronto Planning Board. This second survey was predominantly a tenant survey, although an attempt was made to complete the inventory of those buildings for which information had not been obtained previously. Buildings which contained fifty units or less were included in the first survey, but were excluded from this second survey. Also excluded from this survey were all government-subsidized buildings.

II Survey Methods ...

2. Sample Design:

The sample design for this survey was prepared by Dr. I. P. Fellegi, Statistical Consulting Services, Ottawa, Ontario. He used the data collected during the pilot tenant survey to calculate the sampling variability which might be expected on this main study. These estimates of sampling variability are included in the appendix of this report.

The sample design required a three-level stratification of all apartment units within the sampling universe. The first level was building size - either over 100 units, or 100 units or less. The second level was the geographical area in which the building was situated. Four areas, based on the distance from central Toronto and the proximity to public transportation, were defined for this purpose - central, inner, intermediate, and outer.

These areas are illustrated by the map in the appendix. The third level was the type of apartment unit - bachelor, one bedroom, two bedroom, and three bedroom or larger. This third level of stratification was employed only within the group of buildings with more than 100 units.

II Survey Methods ...

2. Sample Design (Continued):

For buildings of more than 100 units, the sampling ratios were as shown in Table I below:

TABLE I
SAMPLING RATIOS
BUILDINGS OF MORE THAN 100 UNITS

| <u>Geographical Area:</u> | <u>Type of Unit</u> | | | |
|---------------------------|---------------------|--------------------|--------------------|--------------------------------|
| | <u>Bachelor</u> | <u>One Bedroom</u> | <u>Two Bedroom</u> | <u>Three Bedroom or Larger</u> |
| Central | 1/10 | 1/20 | 1/15 | 1/5 |
| Inner | 1/10 | 1/20 | 1/20 | 1/5 |
| Intermediate | 1/10 | 1/30 | 1/30 | 1/10 |
| Outer | 1/10 | 1/40 | 1/40 | 1/30 |

For buildings of 100 units or less, the sampling ratios were as shown in Table II below:

TABLE II
SAMPLING RATIOS
BUILDINGS OF 100 UNITS OR LESS

| <u>Geographical Area:</u> | <u>Sampling Ratio</u> |
|---------------------------|-----------------------|
| Central | 1/15 |
| Inner | 1/20 |
| Intermediate | 1/30 |
| Outer | 1/40 |

In both the above sample types, a serial random sample selection procedure was used to identify those apartment units which would be interviewed.

II Survey Methods ...

2. Sample Design (Continued)

A third type of sampling was employed in the case of four buildings of more than 100 units in which it was impossible to obtain complete inventory information (i.e. the number of each type of unit). In these four buildings in the inner zone, a serial random sample was selected using a sampling ratio of 1 in 20. During the interview, the apartment was classified by type of unit and later assigned to the correct group for coding purposes.

In total, a sample of 2,190 units was selected within 306 buildings.

The distribution of this sample is shown by Table III below:

TABLE III

SAMPLE DISTRIBUTION (SELECTIONS)

| | <u>Geographical Area</u> | | | |
|--|--------------------------|--------------|---------------------------|--------------|
| | <u>Central</u> | <u>Inner</u> | <u>Inter- mediate</u> | <u>Outer</u> |
| <u>Buildings of More Than 100 Units:</u> | | | | |
| Bachelor | 62 | 104 | 84 | 8 |
| One Bedroom | 121 | 191 | 165 | 181 |
| Two Bedroom | 72 | 107 | 124 | 267 |
| Three Bedroom or Larger | 5 | 51 | 52 | 105 |
| Sub-Total | 260 | 453 | 425 | 561 |
| <u>Buildings of 100 Units or Less:</u> | | | | |
| | 91 | 47 | 112 | 241 |
| TOTAL | 351 | 500 | 537 | 802 |

II Survey Methods

2. Sample Design (Continued):

A further subdivision of this sample was made to facilitate sampling variance calculations. In each of the above twenty cells, the selected sample was divided into sample "A" (odd sample numbers) and sample "B" (even sample numbers) to provide a split-half sample for comparison purposes.

The yield of completed interviews and the attrition are described later in this report.

II Survey Methods ...

3. The Questionnaire:

A copy of the questionnaire used in this survey is appended to this report. The questionnaire format was similar to that used in the pilot tenant survey with a few minor revisions. It included questions concerning household data, tenant parking requirements, visitor parking requirements on weekends, and trip generation and attraction.

Although the questionnaire was designed for use in a telephone survey, it was also used to interview some respondents in person when it was found impossible to contact them by telephone.

II Survey Methods . . .

4. Interviewing:

Interviewing was carried out during the period from May 14th to June 21st, 1968. Each respondent was sent an introductory letter explaining the survey and requesting co-operation before interviewing began.

The survey was designed for telephone interviewing, and about 75% of the questionnaires were completed in this manner. The balance were completed by personal interviews, either because these apartments had no telephones or unlisted numbers, or could not be contacted by telephone.

II Survey Methods . . .

5. Sample Yield and Attrition:

The original sample of 2,190 apartment households yielded 1,707 completed interviews (78% of the frame). The distribution of these completed interviews within the twenty cells described previously is shown by Table IV below:

TABLE IV
SAMPLE YIELD DISTRIBUTION

| | <u>Geographical Area</u> | | | |
|--|--------------------------|--------------|---------------------------|--------------|
| | <u>Central</u> | <u>Inner</u> | <u>Inter- mediate</u> | <u>Outer</u> |
| <u>Buildings of More Than 100 Units:</u> | | | | |
| Bachelor | 38 | 75 | 48 | 3 |
| One Bedroom | 98 | 133 | 125 | 142 |
| Two Bedroom | 53 | 96 | 104 | 216 |
| Three Bedroom or Larger | 0 | 38 | 42 | 78 |
| Sub-Total: | 189 | 342 | 319 | 439 |
| <u>Buildings of 100 Units or Less:</u> | | | | |
| | 82 | 35 | 92 | 209 |
| TOTAL | 271 | 377 | 411 | 648 |

II Survey Methods . . .

5. Sample Yield and Attrition (Continued):

The total survey attrition amounted to 22% of the original sample and could be considered normal for surveys of this type within Metropolitan Toronto. Reasons for the attrition are shown by Table V below:

TABLE V
SURVEY ATTRITION

| | | |
|--------------------------|-------|--------|
| Original Sample | 2,190 | (100%) |
| Completed Interviews | 1,707 | (78.0) |
| <u>Attrition:</u> | 483 | (22.0) |
| Refused interview | 199 | (9.1) |
| Could not contact tenant | 165 | (7.5) |
| Vacant apartment | 55 | (2.5) |
| Other reasons | 64 | (2.9) |

II Survey Methods....

6. Weighting Factors:

Upon completion of the interviewing, all interviews were coded and the information transferred to punched cards. Weighting factors were calculated and also punched into these cards. These weighting factors were considered necessary because of the stratified or disproportionate sampling.

This weighting procedure was not necessary to provide valid data within each cell of the twenty-cell matrix used for sampling purposes. It was necessary, however, where different subdivisions of the data were required (i.e. by borough), or where totals were to be provided. For this reason, all the detailed tables in this report have been weighted.

Each weighting factor was calculated as the inverse of the cell sampling ratio divided by the sample yield. In total, forty such factors were required, one for each of the twenty sample cells within both sample "A" and sample "B". These factors are shown by Table VI :

TABLE VI
WEIGHTING FACTORS

BUILDINGS WITH MORE
THAN 100 UNITS:

| | <u>Sample A</u> | <u>Sample B</u> |
|------------------------------|-----------------|-----------------|
| 1. <u>Central Area:</u> | | |
| Bachelor | 16.8 | 15.8 |
| One Bedroom | 22.4 | 27.4 |
| Two Bedroom | 18.8 | 22.2 |
| Three Bedroom or Larger | —* | —* |
| 2. <u>Inner Area:</u> | | |
| Bachelor | 13.5 | 14.3 |
| One Bedroom | 24.1 | 35.6 |
| Two Bedroom | 22.6 | 22.0 |
| Three Bedroom or Larger | 6.7 | 6.8 |
| 3. <u>Intermediate Area:</u> | | |
| Bachelor | 14.5 | 22.1 |
| One Bedroom | 39.0 | 40.2 |
| Two Bedroom | 34.6 | 36.9 |
| Three Bedroom or Larger | 11.6 | 13.5 |
| 4. <u>Outer Area:</u> | | |
| Bachelor | 20.0 | 40.0 |
| One Bedroom | 51.0 | 50.8 |
| Two Bedroom | 52.6 | 46.8 |
| Three Bedroom or Larger | 38.6 | 42.3 |

BUILDINGS WITH 100
UNITS OR LESS:

| | | |
|----------------------|------|------|
| 1. Central Area | 17.8 | 15.7 |
| 2. Inner Area | 25.6 | 28.2 |
| 3. Intermediate Area | 35.7 | 37.2 |
| 4. Outer Area | 63.2 | 35.5 |

*No interviews obtained in this cell.

The weighted total number of apartment units was 57,755 and compared quite well with the inventory count of 57,941 units. The small difference in these two figures was due to computer truncation of figures rather than rounding.

II Survey Methods

7. Tabulation:

All tabulations were prepared using the Quest tabulation program and an I.B.M. 7044 computer. As mentioned previously, all the detailed tables in this report have been weighted by the appropriate factors. Most of the tables presented contain averages which were calculated during the computer tabulation.

Where averages are shown, each figure represents the total number of the variable in that cell (persons, cars, etc.) divided by the total number of apartment units in the cell. Percentage tables give the percentages down each column using the figure at the top of the column as the base or 100%.

III Analysis of Results ...

The detailed tables in this report are self-explanatory and no additional analysis has been carried out by the consultant. The interpretation of the survey results will be undertaken by the Metropolitan Toronto Planning Board.

DETAILED TABLES

GENERAL NOTES CONCERNING THESE TABLES

1. Each table is intended to be self-explanatory. Where applicable, the interview question which provided the data is stated at the top of the table. Exceptions are explained by footnotes.
2. Where percentages are shown, they are based on the figures at the top of each column. Because of computer rounding, percentage figures in a column may not always add to exactly 100%.
3. All tables have been weighted by the calculated weighting factors (see Section II-6)
4. Many tables show averages. In these tables, each figure represents the total number of the variable (persons, automobiles, etc.) in that cell divided by the total number of apartment units in the cell.

1. First, what type of apartment is this?

TYPE OF APARTMENT UNIT

CENTRAL AREA

| | Type of Unit | | | |
|-----------------------|---------------|---------------|---------------|-----------------------|
| | Total | Bachelor | One Bedroom | Two Bedroom Or Larger |
| TOTAL NUMBER OF UNITS | 5,474 100% | 1,004 100% | 3,193 100% | 16 100% |
| Size of Building: | | | | |
| 100 Units or Less | 25.0 | 38.3 | 24.1 | 15.8 |
| 101 - 125 Units | 6.4 | 6.6 | 7.6 | 3.3 |
| 126 - 150 Units | - | - | - | - |
| 151 - 175 Units | 4.9 | 3.2 | 5.5 | 4.7 |
| 176 - 200 Units | 6.9 | 6.4 | 6.4 | 8.5 |
| 201 - 225 Units | 13.2 | 19.6 | 10.8 | 14.5 |
| 226 - 250 Units | 21.1 | 12.8 | 19.3 | 32.5 |
| 251 - 275 Units | 3.9 | 4.9 | 4.0 | 3.0 |
| 276 - 300 Units | - | - | - | - |
| 301 - 325 Units | - | - | - | - |
| 326 - 350 Units | - | - | - | - |
| More Than 350 Units | 18.6 | 8.2 | 22.4 | 17.7 |

T-1A

RECON

1. First, what type of apartment is this?

TYPE OF APARTMENT UNIT

INNER AREA

| | Type of Unit | | | |
|-----------------------|---------------|-----------------|--------------------|--|
| | <u>Total</u> | <u>Bachelor</u> | <u>One Bedroom</u> | <u>Two Bedroom</u> <u>Or Larger</u> |
| TOTAL NUMBER OF UNITS | 6,108 100% | 1,117 100% | 4,161 100% | 2,494 100% |
| | | | | 336 100% |

Size of Building:

| | | | | | |
|---------------------|------|------|------|------|------|
| 100 Units or Less | 11.6 | 6.9 | 9.8 | 15.1 | 23.7 |
| 101 - 125 Units | 6.6 | 5.0 | 7.2 | 7.1 | - |
| 126 - 150 Units | 5.8 | 5.0 | 3.4 | 8.9 | 14.1 |
| 151 - 175 Units | 14.1 | 10.0 | 17.8 | 11.6 | - |
| 176 - 200 Units | 4.9 | 3.7 | 3.4 | 8.0 | 4.0 |
| 201 - 225 Units | 8.3 | 15.0 | 8.9 | 4.5 | 6.0 |
| 226 - 250 Units | 5.7 | 11.2 | 4.0 | 6.2 | 4.0 |
| 251 - 275 Units | 14.2 | 6.2 | 12.6 | 17.9 | 32.2 |
| 276 - 300 Units | 7.1 | 9.9 | 7.5 | 6.2 | - |
| 301 - 325 Units | - | - | - | - | - |
| 326 - 350 Units | - | - | - | - | - |
| More than 350 Units | 21.8 | 27.2 | 25.3 | 14.3 | 16.1 |

1. First, what type of apartment is this?

TYPE OF APARTMENT UNIT

INTERMEDIATE AREA

| | Type of Unit | | | |
|-----------------------|--------------|----------------|----------------|-------------------------------|
| | | One Bedroom | Two Bedroom | Three Bedroom Or Larger |
| T o t a l | | Bachelor | | |
| 13,379 | 1,062 | 6,369 | 5,246 | 702 |
| 100% | 100% | 100% | 100% | 100% |
| TOTAL NUMBER OF UNITS | | | | |

Size of Building:

| | | | | | |
|---------------------|------|------|------|------|------|
| 100 Units or Less | 25.1 | 20.9 | 22.3 | 29.1 | 26.0 |
| 101 - 125 Units | 16.9 | 22.0 | 18.6 | 14.9 | 8.8 |
| 126 - 150 Units | 5.1 | 5.5 | 5.6 | 4.7 | 1.9 |
| 151 - 175 Units | 4.6 | 1.4 | 6.2 | 4.0 | - |
| 176 - 200 Units | 5.0 | 3.4 | 4.3 | 4.8 | 15.7 |
| 201 - 225 Units | 7.4 | 17.2 | 8.8 | 4.7 | - |
| 226 - 250 Units | 1.9 | 2.1 | 3.1 | 0.7 | - |
| 251 - 275 Units | 1.7 | - | 2.5 | 1.4 | - |
| 276 - 300 Units | 5.5 | 6.2 | 6.2 | 4.7 | 3.6 |
| 301 - 325 Units | 10.5 | - | 8.7 | 13.0 | 24.5 |
| 326 - 350 Units | 3.5 | 1.4 | 2.5 | 4.8 | 5.5 |
| More Than 350 Units | 12.8 | 19.9 | 11.2 | 13.1 | 14.0 |

T-1C

RECON

1. First, what type of apartment is this?

TYPE OF APARTMENT UNIT

OUTER AREA

| | Type of Unit | | | | |
|-----------------------|----------------|-------------|----------------|----------------|-------------------------|
| | T o t a l | Bachelor | One Bedroom | Two Bedroom | Three Bedroom Or Larger |
| TOTAL NUMBER OF UNITS | 30,794 100% | 206 100% | 10,107 100% | 15,446 100% | 5,035 100% |

Size of Building:

| | | | | | |
|---------------------|------|------|------|------|------|
| 100 Units or Less | 31.4 | 61.2 | 28.5 | 30.7 | 37.6 |
| 101 - 125 Units | 16.6 | = | 15.6 | 17.9 | 15.2 |
| 126 - 150 Units | 9.2 | = | 7.1 | 10.3 | 10.4 |
| 151 - 175 Units | 10.1 | 9.7 | 9.1 | 11.3 | 8.9 |
| 176 - 200 Units | 9.9 | = | 10.1 | 9.1 | 12.7 |
| 201 - 225 Units | 6.8 | = | 8.6 | 6.3 | 4.8 |
| 226 - 250 Units | 6.2 | 9.7 | 8.3 | 5.2 | 5.7 |
| 251 - 275 Units | 4.0 | = | 4.0 | 4.5 | 2.4 |
| 276 - 300 Units | 1.1 | = | 2.0 | 0.9 | = |
| 301 - 325 Units | 2.5 | = | 4.0 | 1.6 | 2.4 |
| 326 - 350 Units | 2.2 | 19.4 | 3.0 | 2.2 | = |
| More Than 350 Units | = | = | = | = | = |

1. First, what type of apartment is this?
2. (a) How many people, including yourself, live in your household?

AVERAGE NUMBER OF PEOPLE IN THE HOUSEHOLD

BY AREA AND TYPE OF APARTMENT UNIT

| | T o t a l | Geographical Area | | |
|------------------------------|-----------|-------------------|-------|-------------------------|
| | | Central | Inner | Inter- mediate Outer |
| <u>TOTAL NUMBER OF UNITS</u> | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| <u>Type of Apartment:</u> | | | | |
| Bachelor | 1.16 | 1.18 | 1.07 | 1.24 1.19 |
| One Bedroom | 1.84 | 1.78 | 1.63 | 1.84 1.94 |
| Two Bedroom | 2.80 | 2.55 | 2.32 | 2.70 2.93 |
| Three Bedroom or Larger | 3.94 | 2.00 | 2.75 | 3.17 4.13 |
| All Types | 2.43 | 1.85 | 1.81 | 2.20 2.79 |

T-2A

RECON

2.(a) How many people, including yourself, live in your household?

AVERAGE NUMBER OF PEOPLE IN THE HOUSEHOLD

BY AREA AND BUILDING SIZE

| | T o t a l | Central | Geographical Area | | |
|-----------------------|-----------|---------|-------------------|-------------------|--------|
| | | | Inner | Inter- mediate | Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 | 30,794 |
| Size of Building: | | | | | |
| 100 Units or Less | | | | | |
| 101 - 125 Units | 2.64 | 1.82 | 1.85 | 2.23 | 2.97 |
| 126 - 150 Units | 2.47 | 2.01 | 1.89 | 2.40 | 2.59 |
| | 2.76 | - | 1.95 | 2.12 | 3.04 |
| 151 - 175 Units | 2.53 | 1.89 | 1.88 | 2.26 | 2.88 |
| 176 - 200 Units | 2.56 | 1.94 | 2.09 | 2.07 | 2.81 |
| 201 - 225 Units | 2.17 | 1.52 | 1.71 | 1.88 | 2.67 |
| 226 - 250 Units | 2.36 | 1.99 | 1.76 | 2.07 | 2.76 |
| 251 - 275 Units | 2.06 | 1.71 | 1.87 | 2.30 | 2.26 |
| 276 - 300 Units | 1.95 | - | 1.70 | 2.06 | 2.12 |
| 301 - 325 Units | 2.39 | - | - | 2.31 | 2.53 |
| 326 - 350 Units | 2.31 | - | - | 2.45 | 2.22 |
| More Than 350 Units | 1.86 | 1.91 | 1.66 | 2.03 | - |
| All Buildings | 2.43 | 1.85 | 1.81 | 2.20 | 2.79 |

1. First, what type of apartment is this?
2. (a) How many people, including yourself, live in your household?
- (b) How many are males, 18 or over?

AVERAGE NUMBER OF MALES EIGHTEEN YEARS AND OVER IN THE HOUSEHOLD

BY AREA AND TYPE OF APARTMENT UNIT

| | T o t a l | Geographical Area | | |
|------------------------------|-----------|-------------------|-------|-------------------------|
| | | Central | Inner | Inter- mediate Outer |
| <u>TOTAL NUMBER OF UNITS</u> | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| <u>Type of Apartment:</u> | | | | |
| Bachelor | 0.55 | 0.54 | 0.47 | 0.56 0.90 |
| One Bedroom | 0.80 | 0.81 | 0.66 | 0.78 0.87 |
| Two Bedroom | 0.99 | 0.96 | 0.95 | 0.99 0.99 |
| Three Bedroom or Larger | 1.24 | 1.00 | 1.20 | 1.11 1.26 |
| All Types | 0.91 | 0.80 | 0.75 | 0.86 1.00 |

- 2.(a) How many people, including yourself, live in your household?
 2.(b) How many are males, 18 or over?

AVERAGE NUMBER OF MALES EIGHTEEN YEARS AND OVER IN THE HOUSEHOLD

BY AREA AND BUILDING SIZE

| | T o t a l | Geographical Area | | |
|-----------------------|-----------|-------------------|-------|-------------------|
| | | Central | Inner | Inter- mediate |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 |
| | | | | 30,794 |
| Size of Building: | | | | |
| 100 Units or Less | 0.89 | 0.70 | 0.68 | 0.82 |
| 101 - 125 Units | 0.94 | 0.69 | 0.55 | 0.98 |
| 126 - 150 Units | 1.04 | - | 0.93 | 1.05 |
| | | | | 1.06 |
| 151 - 175 Units | 0.92 | 0.63 | 0.81 | 0.67 |
| 176 - 200 Units | 0.99 | 0.92 | 0.95 | 0.78 |
| 201 - 225 Units | 0.84 | 0.60 | 0.54 | 0.85 |
| | | | | 1.03 |
| 226 - 250 Units | 1.01 | 1.05 | 0.74 | 0.99 |
| 251 - 275 Units | 0.85 | 0.77 | 0.74 | 0.68 |
| 276 - 300 Units | 0.76 | - | 0.90 | 0.67 |
| | | | | 1.05 |
| 301 - 325 Units | 1.01 | - | - | 0.96 |
| 326 - 350 Units | 0.82 | - | - | 0.85 |
| More Than 350 Units | 0.79 | 0.83 | 0.74 | 0.83 |
| | | | | - |
| All Buildings | 0.91 | 0.80 | 0.75 | 0.86 |
| | | | | 1.00 |

1. First, what type of apartment is this?
2. (a) How many people, including yourself, live in your household?
- (b) How many are females, 18 or over?

AVERAGE NUMBER OF FEMALES EIGHTEEN YEARS AND OVER IN THE HOUSEHOLD

BY AREA AND TYPE OF APARTMENT UNIT

| | T o t a l | Geographical Area | | |
|-------------------------|-----------|-------------------|-------|------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| Type of Apartment: | | | | |
| Bachelor | 0.61 | 0.64 | 0.60 | 0.64 0.29 |
| One Bedroom | 0.93 | 0.91 | 0.92 | 0.98 0.92 |
| Two Bedroom | 1.12 | 1.40 | 1.24 | 1.16 1.07 |
| Three bedroom or Larger | 1.23 | 1.00 | 1.23 | 1.31 1.21 |
| All Types | 1.03 | 0.97 | 0.98 | 1.04 1.04 |

- 2.(a) How many people, including yourself, live in your household?
 2.(b) How many are females, 18 or over?

AVERAGE NUMBER OF FEMALES EIGHTEEN YEARS AND OVER IN THE HOUSEHOLD

BY AREA AND BUILDING SIZE

| | T o t a l | Central | Geographical Area | | |
|-----------------------|-----------|---------|-------------------|-------------------|--------|
| | | | Inner | Inter- mediate | Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 | 30,794 |
| Size of Building: | | | | | |
| 100 Units or Less | 1.07 | 0.98 | 1.04 | 1.13 | 1.06 |
| 101 - 125 Units | 1.03 | 1.08 | 1.24 | 0.93 | 1.05 |
| 126 - 150 Units | 1.04 | - | 0.96 | 0.96 | 1.08 |
| 151 - 175 Units | 1.01 | 1.12 | 0.94 | 1.41 | 0.94 |
| 176 - 200 Units | 1.00 | 0.90 | 0.97 | 0.91 | 1.03 |
| 201 - 225 Units | 0.97 | 0.92 | 1.13 | 0.93 | 0.96 |
| 226 - 250 Units | 0.92 | 0.89 | 0.92 | 0.92 | 0.95 |
| 251 - 275 Units | 1.06 | 0.86 | 1.02 | 1.30 | 1.08 |
| 276 - 300 Units | 1.02 | - | 0.80 | 1.19 | 1.00 |
| 301 - 325 Units | 0.98 | - | - | 0.91 | 1.11 |
| 326 - 350 Units | 1.29 | - | - | 1.19 | 1.35 |
| More Than 350 Units | 0.99 | 1.08 | 0.92 | 1.00 | - |
| All Buildings | 1.03 | 0.97 | 0.98 | 1.04 | 1.04 |

1. First, what type of apartment is this?
2. (a) How many people, including yourself, live in your household?
- (b) How many are children under 6?

AVERAGE NUMBER OF CHILDREN UNDER SIX YEARS IN THE HOUSEHOLD

BY AREA AND TYPE OF APARTMENT UNIT

| | T o t a l | Geographical Area | | |
|------------------------------|-----------|-------------------|-------|-------------------------|
| | | Central | Inner | Inter- mediate Outer |
| <u>TOTAL NUMBER OF UNITS</u> | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| <u>Type of Apartment:</u> | | | | |
| Bachelor | - | - | - | - |
| One Bedroom | 0.09 | 0.05 | 0.03 | 0.07 0.14 |
| Two Bedroom | 0.38 | 0.11 | 0.06 | 0.31 0.48 |
| Three Bedroom or larger | 0.45 | - | 0.04 | 0.26 0.51 |
| All Types | 0.25 | 0.05 | 0.04 | 0.17 0.37 |

- 2.(a) How many people, including yourself, live in your household?
 2.(b) How many are children under 6?

AVERAGE NUMBER OF CHILDREN UNDER SIX YEARS IN THE HOUSEHOLD

BY AREA AND BUILDING SIZE

| | T o t a l | Geographical Area | | |
|-----------------------|-----------|-------------------|-------|-------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| Size of Building: | | | | |
| 100 Units or Less | 0.35 | 0.11 | 0.08 | 0.11 0.50 |
| 101 - 125 Units | 0.29 | 0.18 | 0.11 | 0.32 0.30 |
| 126 - 150 Units | 0.19 | - | 0.03 | 0.05 0.26 |
| 151 - 175 Units | 0.27 | - | 0.07 | 0.18 0.38 |
| 176 - 200 Units | 0.26 | 0.07 | 0.06 | 0.11 0.35 |
| 201 - 225 Units | 0.22 | - | 0.04 | 0.07 0.44 |
| 226 - 250 Units | 0.20 | 0.05 | 0.05 | 0.15 0.33 |
| 251 - 275 Units | 0.09 | - | - | 0.32 0.15 |
| 276 - 300 Units | 0.16 | - | - | 0.16 0.42 |
| 301 - 325 Units | 0.22 | - | - | 0.24 0.19 |
| 326 - 350 Units | 0.20 | - | - | 0.38 0.08 |
| More Than 350 Units | 0.03 | - | - | 0.09 - |
| All Buildings | 0.25 | 0.05 | 0.04 | 0.17 0.37 |

1. First, what type of apartment is this?
2. (a) How many people, including yourself, live in your household?
- (b) How many are children 6 to 12?

AVERAGE NUMBER OF CHILDREN BETWEEN SIX AND TWELVE YEARS IN THE HOUSEHOLD

BY AREA AND TYPE OF APARTMENT UNIT

| | T o t a l | Geographical Area | | |
|------------------------------|-----------|-------------------|-------|------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| <u>TOTAL NUMBER OF UNITS</u> | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| <u>Type of Apartment:</u> | | | | |
| Bachelor | - | - | - | - |
| One Bedroom | 0.01 | - | 0.01 | 0.03 |
| Two Bedroom | 0.20 | 0.03 | 0.05 | 0.15 0.25 |
| Three Bedroom or Larger | 0.53 | - | 0.17 | 0.29 0.59 |
| All Types | 0.14 | 0.01 | 0.03 | 0.08 0.23 |

- 2.(a) How many people, including yourself, live in your household?
 2.(b) How many are children 6 to 12?

AVERAGE NUMBER OF CHILDREN BETWEEN SIX AND

TWELVE YEARS IN THE HOUSEHOLD

BY AREA AND BUILDING SIZE

| | T o t a l | Central | Geographical Area | | |
|-----------------------|-----------|---------|-------------------|-------------------|--------|
| | | | Inner | Inter- mediate | Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 | 30,794 |
| Size of Buildings: | | | | | |
| 100 Units or Less | 0.20 | - | 0.05 | 0.07 | 0.28 |
| 101 - 125 Units | 0.11 | - | - | 0.10 | 0.13 |
| 126 - 150 Units | 0.28 | - | 0.01 | - | 0.39 |
| 151 - 175 Units | 0.19 | 0.14 | 0.02 | - | 0.29 |
| 176 - 200 Units | 0.21 | - | 0.11 | 0.23 | 0.25 |
| 201 - 225 Units | 0.04 | - | - | - | 0.09 |
| 226 - 250 Units | 0.15 | - | 0.05 | - | 0.29 |
| 251 - 275 Units | 0.05 | - | 0.07 | - | 0.04 |
| 276 - 300 Units | 0.01 | - | - | 0.03 | - |
| 301 - 325 Units | 0.15 | - | - | 0.16 | 0.13 |
| 326 - 350 Units | - | - | - | - | - |
| More Than 350 Units | 0.04 | - | - | 0.09 | - |
| All Buildings | 0.14 | 0.01 | 0.03 | 0.08 | 0.23 |

1. First, what type of apartment is this?
- 2.(a) How many people, including yourself, live in your household?
- (b) How many are children 13 to 17?

AVERAGE NUMBER OF CHILDREN BETWEEN THIRTEEN AND SEVENTEEN YEARS IN THE HOUSEHOLD

BY AREA AND TYPE OF APARTMENT UNIT

| | T o t a l | Geographical Area | | |
|-----------------------|-----------|-------------------|-------|-------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |

Type of Apartment:

| | | | | | |
|-------------------------|------|------|------|------|------|
| Bachelor | 0.00 | - | .. | 0.01 | - |
| One Bedroom | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 |
| Two Bedroom | 0.12 | 0.06 | 0.03 | 0.09 | 0.15 |
| Three Bedroom or Larger | 0.47 | - | 0.10 | 0.20 | 0.54 |
| All Types | 0.10 | 0.02 | 0.02 | 0.05 | 0.17 |

- 2.(a) How many people, including yourself, live in your household?
 2.(b) How many are children 13 to 17?

AVERAGE NUMBER OF CHILDREN BETWEEN THIRTEEN AND

SEVENTEEN YEARS IN THE HOUSEHOLD

BY AREA AND BUILDING SIZE

| | T o t a l | Central | Geographical Area | | |
|-----------------------|-----------|---------|-------------------|-------------------|--------|
| | | | Inner | Inter- mediate | Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 | 30,794 |
| Size of Building | | | | | |
| 100 Units or Less | 0.15 | 0.02 | 0.03 | 0.11 | 0.19 |
| 101 - 125 Units | 0.10 | 0.05 | - | 0.05 | 0.13 |
| 126 - 150 Units | 0.19 | - | 0.01 | 0.04 | 0.26 |
| 151 - 175 Units | 0.15 | - | 0.04 | - | 0.23 |
| 176 - 200 Units | 0.09 | 0.05 | - | 0.03 | 0.12 |
| 201 - 225 Units | 0.10 | - | - | 0.03 | 0.19 |
| 226 - 250 Units | 0.10 | - | - | - | 0.20 |
| 251 - 275 Units | 0.02 | 0.09 | 0.04 | - | - |
| 276 - 300 Units | - | - | - | - | - |
| 301 - 325 Units | 0.02 | - | - | 0.03 | - |
| 326 - 350 Units | 0.01 | - | - | 0.03 | - |
| More Than 350 Units | 0.01 | - | 0.00 | 0.02 | - |
| All Buildings | 0.10 | 0.02 | 0.02 | 0.05 | 0.17 |

T-7B

RECON

2.(d) Is this shared accommodation or are you all one family?

TYPE OF ACCOMMODATION

SHARED VERSUS FAMILY UNIT

| | T o t a l | Geographical Area | | |
|-----------------------|----------------|-------------------|---------------|----------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 100% | 5,474 100% | 8,108 100% | 13,379 100% 30,794 100% |
| Shared | 7.4 | 19.7 | 14.5 | 5.9 3.9 |
| Family | 92.6 | 80.3 | 85.5 | 94.1 96.1 |

1. First, what type of apartment is this?
- 2.(d) Is this shared accommodation or are you all one family?

TYPE OF ACCOMMODATION BY

TYPE OF APARTMENT UNIT

CENTRAL AREA

| | Type of Unit | | | | |
|-----------------------|---------------|---------------|----------------|----------------|-------------------------------|
| | T o t a l | Bachelor | One Bedroom | Two Bedroom | Three Bedroom Or Larger |
| TOTAL NUMBER OF UNITS | 5,474 100% | 1,004 100% | 3,193 100% | 1,261 100% | 16 100% |
| Shared | 19.7 | 3.0 | 16.9 | 40.0 | - |
| Family | 80.3 | 97.0 | 83.1 | 60.0 | 100.0 |

1. First, what type of apartment is this?
- 2.(d) Is this shared accommodation or are you all one family?

TYPE OF ACCOMMODATION BY

TYPE OF APARTMENT UNIT

INNER AREA

| | Type of Unit | | | |
|-----------------------|---------------|---------------|---------------|-----------------------|
| | Total | Bachelor | One Bedroom | Two Bedroom Or Larger |
| TOTAL NUMBER OF UNITS | 8,108 100% | 1,117 100% | 4,161 100% | 2,494 100% |
| Shared | 14.5 | 1.0 | 14.1 | 11.9 |
| Family | 85.5 | 99.0 | 85.9 | 78.1 |
| | | | | 15.5 |
| | | | | 84.5 |

1. First, what type of apartment is this?
- 2.(d) Is this shared accommodation or are you all one family?

TYPE OF ACCOMMODATION BY

TYPE OF APARTMENT UNIT

INTERMEDIATE AREA

| | Type of Unit | | | |
|-----------------------|----------------|---------------|---------------|-------------------------|
| | Total | Bachelor | One Bedroom | Two Bedroom |
| | | | | Three Bedroom Or Larger |
| TOTAL NUMBER OF UNITS | 13,379 100% | 1,062 100% | 6,369 100% | 5,246 100% |
| 702 100% | | | | |
| Shared | 5.9 | 7.6 | 4.4 | 6.8 |
| Family | 94.1 | 92.4 | 95.6 | 93.2 |
| | | | | 12.1 87.9 |

1. First, what type of apartment is this?
2.(d) Is this shared accommodation or are you all one family?

TYPE OF ACCOMMODATION BY

TYPE OF APARTMENT UNIT

OUTER AREA

| | Type of Unit | | | |
|-----------------------|----------------|-------------|----------------|-----------------------|
| | T o t a l | Bachelor | One Bedroom | Two Bedroom Or Larger |
| TOTAL NUMBER OF UNITS | 30,794 100% | 206 100% | 10,107 100% | 15,446 100% |
| Shared | 3.9 | 30.8 | 3.8 | 3.1 |
| Family | 96.1 | 69.2 | 96.2 | 96.9 |

1. First, what type of apartment is this?
- 2.(c) In total, how many persons are working FULL TIME?

AVERAGE NUMBER OF PEOPLE IN THE HOUSEHOLD WORKING FULL TIME

BY AREA AND TYPE OF APARTMENT UNIT

| | T o t a l | Geographical Area | | |
|-------------------------|-----------|-------------------|-------|------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| Type of Apartment: | | | | |
| Bachelor | 0.98 | 1.03 | 0.91 | 1.03 0.89 |
| One Bedroom | 1.30 | 1.39 | 1.19 | 1.37 1.27 |
| Two Bedroom | 1.40 | 1.82 | 1.42 | 1.50 1.32 |
| Three Bedroom or Larger | 1.52 | - | 1.17 | 1.57 1.54 |
| All Types | 1.34 | 1.42 | 1.22 | 1.40 1.34 |

2.(c) In total, how many persons are working FULL TIME?

AVERAGE NUMBER OF PEOPLE IN THE HOUSEHOLD WORKING FULL TIME

BY AREA AND BUILDING SIZE

| | T o t a l | Geographical Area | | |
|-----------------------|-----------|-------------------|-------|-------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| Size of Building: | | | | |
| 100 Units or Less | 1.22 | 1.23 | 0.80 | 1.37 1.20 |
| 101 - 125 Units | 1.35 | 1.44 | 1.05 | 1.42 1.35 |
| 126 - 150 Units | 1.37 | - | 0.93 | 1.44 1.43 |
| 151 - 175 Units | 1.48 | 1.40 | 1.27 | 1.90 1.48 |
| 176 - 200 Units | 1.36 | 1.46 | 1.19 | 1.20 1.40 |
| 201 - 225 Units | 1.41 | 1.29 | 1.37 | 1.56 1.38 |
| 226 - 250 Units | 1.41 | 1.57 | 1.27 | 1.60 1.32 |
| 251 - 275 Units | 1.26 | 1.32 | 1.29 | 1.16 1.25 |
| 276 - 300 Units | 1.20 | - | 1.35 | 1.12 1.14 |
| 301 - 325 Units | 1.42 | - | - | 1.33 1.58 |
| 326 - 350 Units | 1.65 | - | - | 1.59 1.69 |
| More Than 350 Units | 1.44 | 1.62 | 1.41 | 1.37 - |
| All Buildings | 1.34 | 1.42 | 1.22 | 1.40 1.34 |

1. First, what type of apartment is this?
- 2.(c) How many persons are working PART TIME?

AVERAGE NUMBER OF PEOPLE IN THE HOUSEHOLD WORKING PART TIME

BY AREA AND TYPE OF APARTMENT UNIT

| | T o t a l | Geographical Area | | |
|-----------------------|-----------|-------------------|-------|-------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |

Type of Apartment:

| | | | | | |
|-------------------------|------|------|------|------|------|
| Bachelor | 0.08 | 0.03 | 0.06 | 0.08 | 0.31 |
| One Bedroom | 0.08 | 0.07 | 0.07 | 0.09 | 0.07 |
| Two Bedroom | 0.10 | 0.07 | 0.15 | 0.09 | 0.10 |
| Three Bedroom or Larger | 0.17 | - | 0.16 | 0.14 | 0.17 |
| All Types | 0.10 | 0.06 | 0.10 | 0.09 | 0.10 |

T-11A

RECON

2.(c) How many persons are working PART TIME?

AVERAGE NUMBER OF PEOPLE IN THE HOUSEHOLD WORKING PART TIME

BY AREA AND BUILDING SIZE

| | T o t a l | Geographical Area | | | |
|-----------------------|-----------|-------------------|-------|-------------------|--------|
| | | Central | Inner | Inter- mediate | Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 | 30,794 |
| Size of building: | | | | | |
| 100 Units or Less | 0.09 | 0.10 | 0.23 | 0.10 | 0.08 |
| 101 - 125 Units | 0.09 | - | 0.05 | 0.10 | 0.10 |
| 126 - 150 Units | 0.07 | - | 0.10 | - | 0.08 |
| 151 - 175 Units | 0.14 | 0.08 | 0.05 | - | 0.21 |
| 176 - 200 Units | 0.10 | - | 0.30 | 0.08 | 0.09 |
| 201 - 225 Units | 0.10 | 0.05 | 0.05 | 0.12 | 0.13 |
| 226 - 250 Units | 0.10 | 0.07 | 0.11 | - | 0.13 |
| 251 - 275 Units | 0.07 | 0.22 | 0.07 | 0.32 | - |
| 276 - 300 Units | 0.17 | - | 0.12 | 0.23 | 0.15 |
| 301 - 325 Units | 0.11 | - | - | 0.06 | 0.20 |
| 326 - 350 Units | 0.05 | - | - | - | 0.08 |
| More Than 350 Units | 0.06 | - | 0.06 | 0.11 | - |
| All Buildings | 0.10 | 0.06 | 0.10 | 0.09 | 0.10 |

T-11B

RECON

1. First, what type of apartment is this?
- 2.(e) Now considering all working members of this household would the total income of this apartment be:

AVERAGE TOTAL HOUSEHOLD ANNUAL INCOME

BY AREA AND TYPE OF APARTMENT UNIT

| | T o t a l | Geographical Area | | |
|-------------------------|-----------|-------------------|---------|-------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| Type of Apartment: | | | | |
| Bachelor | \$7,000 | \$7,200 | \$6,720 | \$7,440 \$5,860 |
| One Bedroom | 9,120 | 9,480 | 8,960 | 8,900 9,180 |
| Two Bedroom | 9,440 | 12,100 | 11,320 | 9,460 8,900 |
| Three Bedroom or Larger | 10,660 | - | 13,340 | 13,080 10,100 |
| All Types | 9,200 | 9,600 | 9,280 | 9,180 9,100 |

2.(e) Now considering all working members of this household, would the total income of this apartment be:

AVERAGE TOTAL HOUSEHOLD ANNUAL INCOME

BY AREA AND BUILDING SIZE

| | T o t a l | Geographical Area | | |
|-----------------------|-----------|-------------------|---------|-------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| Size of Building: | | | | |
| 100 Units or Less | \$8,300 | \$8,980 | \$9,120 | \$8,320 \$8,080 |
| 101 - 125 Units | 9,240 | 9,320 | 7,920 | 9,340 9,300 |
| 126 - 150 Units | 9,320 | - | 8,280 | 9,060 9,560 |
| 151 - 175 Units | 8,960 | 8,080 | 8,580 | 8,780 9,260 |
| 176 - 200 Units | 10,720 | 11,020 | 11,640 | 10,860 10,500 |
| 201 - 225 Units | 9,640 | 9,260 | 8,740 | 9,760 10,200 |
| 226 - 250 Units | 9,600 | 10,280 | 8,120 | 8,320 9,740 |
| 251 - 275 Units | 10,360 | 15,000 | 10,980 | 8,340 10,100 |
| 276 - 300 Units | 8,440 | - | 9,520 | 7,740 7,860 |
| 301 - 325 Units | 9,000 | - | - | 9,180 8,660 |
| 326 - 350 Units | 9,820 | - | - | 11,840 8,640 |
| More Than 350 Units | 9,600 | 9,780 | 9,340 | 9,760 - |
| All Buildings | 9,200 | 9,600 | 9,280 | 9,180 9,100 |

F-12B

RECON

- 2.(c) In total, how many persons are working FULL TIME?
 2.(e) Now considering all working members of this household, would the total income of this apartment be:

AVERAGE TOTAL HOUSEHOLD ANNUAL INCOME

BY AREA AND NUMBER OF RESIDENTS

WORKING FULL TIME

| | T o t a l | Geographical Area | | |
|-----------------------|-----------|-------------------|-------|------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |

Number Working Full Time:

| | | | | | |
|------------|---------|---------|---------|---------|---------|
| One | \$5,020 | \$4,600 | \$5,320 | \$4,760 | \$5,020 |
| Two | 8,240 | 8,380 | 8,480 | 7,920 | 8,260 |
| Three | 10,840 | 10,680 | 11,040 | 10,680 | 10,960 |
| Four | 11,840 | 12,840 | 13,200 | 12,260 | 10,720 |
| Five | 14,200 | 15,000 | 14,320 | 15,000 | 13,000 |
| All Groups | 9,200 | 9,600 | 9,280 | 9,180 | 9,100 |

- 2.(c) In total, how many persons are working PART TIME?
 2.(e) Now considering all working members of this household, would the total income of this apartment be:

AVERAGE TOTAL HOUSEHOLD ANNUAL INCOME

BY AREA AND NUMBER OF RESIDENTS

WORKING PART TIME

| | T o t a l | Geographical Area | | |
|---------------------------|-----------|-------------------|---------|------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| Number Working Part Time: | | | | |
| One | \$9,280 | \$9,600 | \$9,340 | \$9,300 \$9,180 |
| Two | 8,740 | 9,620 | 9,180 | 8,120 8,600 |
| Three | 6,960 | - | 5,000 | 5,000 7,860 |
| Four | 9,000 | - | - | - 9,000 |
| All Groups | 9,200 | 9,600 | 9,280 | 9,180 9,100 |

1. First, what type of apartment is this?
3. How many vehicles (including both cars and trucks) are owned or leased and driven by members of your household and normally parked at this address?

AVERAGE NUMBER OF VEHICLES OWNED OR LEASED BY HOUSEHOLD MEMBERS

BY AREA AND TYPE OF APARTMENT UNIT

| | T o t a l | Geographical Area | | |
|-------------------------|-----------|-------------------|-------|------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| Type of Apartment: | | | | |
| Bachelor | 0.41 | 0.23 | 0.46 | 0.49 0.60 |
| One Bedroom | 0.80 | 0.58 | 0.62 | 0.76 0.97 |
| Two Bedroom | 1.00 | 0.71 | 0.95 | 0.89 1.07 |
| Three Bedroom or Larger | 1.37 | 1.00 | 1.28 | 1.36 1.38 |
| All Types | 0.92 | 0.55 | 0.73 | 0.82 1.08 |

3. How many vehicles (including both cars and trucks) are owned or leased and driven by members of your household and normally parked at this address?

AVERAGE NUMBER OF VEHICLES OWNED OR LEASED BY HOUSEHOLD MEMBERS

BY AREA AND SIZE OF BUILDING

| | T o t a l | Central | Geographical Area | | |
|-----------------------|-----------|---------|-------------------|-------------------|--------|
| | | | Inner | Inter- mediate | Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 | 30,794 |
| Size of Building: | | | | | |
| 100 Units or Less | 0.93 | 0.37 | 0.85 | 0.80 | 1.06 |
| 101 - 125 Units | 0.94 | 0.36 | 0.64 | 0.79 | 1.08 |
| 126 - 150 Units | 0.89 | - | 0.93 | 0.72 | 0.92 |
| 151 - 175 Units | 0.97 | 0.48 | 0.71 | 0.80 | 1.13 |
| 176 - 200 Units | 1.03 | 0.86 | 0.69 | 0.82 | 1.14 |
| 201 - 225 Units | 0.87 | 0.32 | 0.54 | 0.83 | 1.19 |
| 226 - 250 Units | 0.95 | 0.72 | 0.72 | 0.54 | 1.19 |
| 251 - 275 Units | 0.38 | 0.64 | 0.75 | 0.34 | 1.15 |
| 276 - 300 Units | 0.93 | - | 0.73 | 1.00 | 1.15 |
| 301 - 325 Units | 0.94 | - | - | 0.88 | 1.04 |
| 326 - 350 Units | 0.84 | - | - | 0.92 | 0.79 |
| More Than 350 Units | 0.78 | 0.71 | 0.70 | 0.91 | - |
| All Buildings | 0.92 | 0.55 | 0.73 | 0.82 | 1.08 |

T-13B

RECON

- 2.(a) How many people, including yourself live in your household?
 3. How many vehicles (including both cars and trucks) are owned or leased and driven by members of your household and normally parked at this address?

AVERAGE NUMBER OF VEHICLES OWNED OR LEASED BY HOUSEHOLD MEMBERS

BY AREA AND NUMBER OF RESIDENTS

| | T o t a l | Geographical Area | | | |
|-----------------------|-----------|-------------------|-------|-------------------|--------|
| | | Central | Inner | Inter- mediate | Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 | 30,794 |

Number of Residents:

| | | | | | |
|----------------|------|------|------|------|------|
| One | 0.55 | 0.37 | 0.46 | 0.51 | 0.76 |
| Two | 0.91 | 0.64 | 0.84 | 0.84 | 1.05 |
| Three | 1.08 | 0.67 | 1.09 | 1.10 | 1.09 |
| Four | 1.22 | 0.50 | 0.93 | 1.00 | 1.30 |
| Five | 1.13 | 1.00 | - | 0.89 | 1.18 |
| Six | 0.91 | - | - | 1.00 | 0.91 |
| Seven | 1.19 | - | - | - | 1.64 |
| All Households | 0.92 | 0.55 | 0.73 | 0.82 | 1.08 |

- 2.(c) In total how many persons are working FULL TIME?
 3. How many vehicles (including both cars and trucks) are owned or leased and driven by members of your household and normally parked at this address?

AVERAGE NUMBER OF VEHICLES OWNED OR LEASED BY HOUSEHOLD MEMBERS

BY AREA AND NUMBER OF RESIDENTS WORKING FULL TIME

| | T o t a l | Geographical Area | | |
|-----------------------|-----------|-------------------|-------|-------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |

Number Working Full Time:

| | | | | | |
|----------------|------|------|------|------|------|
| One | 0.90 | 0.46 | 0.69 | 0.79 | 1.06 |
| Two | 1.01 | 0.70 | 0.86 | 0.90 | 1.17 |
| Three | 1.21 | 0.34 | 1.09 | 1.07 | 1.48 |
| Four | 1.16 | 0.71 | 0.80 | 0.98 | 1.57 |
| Five | 1.00 | - | - | - | 1.00 |
| All Households | 0.92 | 0.55 | 0.73 | 0.82 | 1.08 |

2.(c) In total how many persons are working PART TIME?

3. How many vehicles (including both cars and trucks) are owned or leased and driven by members of your household and normally parked at this address?

AVERAGE NUMBER OF VEHICLES OWNED OR LEASED BY HOUSEHOLD MEMBERS

BY AREA AND NUMBER OF RESIDENTS WORKING PART TIME

| | T o t a l | Geographical Area | | |
|-----------------------|-----------|-------------------|-------|-------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |

Number Working Part Time:

| | | | | | |
|----------------|------|------|------|------|------|
| None | 0.89 | 0.55 | 0.71 | 0.80 | 1.04 |
| One | 1.02 | 0.49 | 0.84 | 0.87 | 1.20 |
| Two | 3.60 | 0.00 | 3.00 | 4.33 | 3.73 |
| Three | 3.00 | - | - | - | 3.00 |
| All Households | 0.92 | 0.55 | 0.73 | 0.82 | 1.08 |

- 2.(e) Now considering all working members of this household would the total income of this apartment be:
 IF REFUSED TO STATE, ASK: Would it be over or under \$8,000?
3. How many vehicles (including both cars and trucks) are owned or leased and driven by members of your household and normally parked at this address?

AVERAGE NUMBER OF VEHICLES OWNED OR LEASED BY HOUSEHOLD MEMBERS

BY AREA AND TOTAL HOUSEHOLD ANNUAL INCOME

| | T o t a l | Geographical Area | | |
|-----------------------|-----------|-------------------|-------|------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |

Total Annual Income:

| | | | | | |
|----------------------|------|------|------|------|------|
| Under \$4,000 | 0.34 | 0.47 | 0.12 | 0.21 | 0.52 |
| \$4,000 - \$5,999 | 0.91 | 0.20 | 0.40 | 0.55 | 1.42 |
| \$6,000 - \$7,999 | 0.78 | 0.41 | 0.47 | 0.81 | 0.97 |
| \$8,000 - \$9,999 | 0.93 | 0.55 | 0.75 | 0.90 | 1.07 |
| \$10,000 - \$11,999 | 0.99 | 0.58 | 0.79 | 1.10 | 1.08 |
| \$12,000 - \$13,999 | 1.23 | 0.94 | 0.89 | 0.87 | 1.42 |
| \$14,000 or Over | 1.20 | 0.86 | 1.29 | 1.06 | 1.39 |
| Over \$8,000 | 1.12 | 0.67 | 0.98 | 1.06 | 1.25 |
| Under \$8,000 | 0.72 | 0.29 | 0.40 | 0.59 | 0.84 |
| About \$8,000 | 0.93 | 1.06 | 0.80 | 0.75 | 1.01 |
| Did not State Income | 0.83 | 0.51 | 0.58 | 0.70 | 1.00 |
| Student | 0.24 | 0.26 | 1.00 | - | - |
| All Households | 0.92 | 0.55 | 0.73 | 0.82 | 1.08 |

T-13F

4. Is this vehicle parked on the premises (apartment property) when not in use?
 5. IF "YES", Is it parked inside or outside?
 6. IF "NO", Where do you usually park it?

TENANT PARKING ACCOMMODATION FOR ALL VEHICLES OWNED OR LEASED

BY HOUSEHOLD MEMBERS

| | T o t a l | Geographical Area | | |
|--------------------------|----------------|-------------------|---------------|----------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF VEHICLES | 53,155 100% | 3,010 100% | 5,918 100% | 10,970 100% 33,257 100% |

Parking Accommodation:

| | | | | | |
|-------------------|------|------|------|------|------|
| On Premises: | 96.9 | 95.5 | 97.7 | 97.7 | 96.6 |
| Inside | 61.0 | 87.0 | 86.6 | 71.7 | 50.2 |
| Outside | 35.9 | 8.5 | 11.1 | 26.0 | 46.4 |
| Off Premises: | 3.1 | 4.5 | 2.3 | 2.3 | 3.4 |
| On Street | 0.9 | 2.8 | 1.5 | 0.8 | 0.7 |
| On Private Lot | 1.8 | 0.5 | - | 1.4 | 2.4 |
| In Private Garage | 0.3 | 1.2 | 0.8 | - | 0.2 |
| Other | 0.1 | - | - | 0.1 | 0.1 |

4. Is this vehicle parked on the premises (apartment property) when not in use?
 5. IF "YES", Is it parked inside or outside?
 7. How much does it cost you for parking at your residence?

COST OF INDOOR PARKING ON APARTMENT PREMISES

| | T o t a l | Geographical Area | | |
|------------------------------|----------------|-------------------|---------------|---------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL VEHICLES PARKED INSIDE | 32,304 100% | 2,619 100% | 5,125 100% | 7,865 100% 16,695 100% |

Monthly Parking Cost:

| | | | | | |
|-----------------------------|--------|---------|---------|--------|--------|
| Under \$5.00 | 0.7 | - | 0.3 | 1.0 | 0.8 |
| \$5.00 | 2.9 | - | 0.7 | 5.0 | 3.1 |
| \$6.00 to \$7.00 | 5.8 | 0.6 | 0.4 | 5.4 | 8.6 |
| \$8.00 to \$9.00 | 14.7 | 2.2 | 1.6 | 16.1 | 20.2 |
| \$10.00 | 58.2 | 62.1 | 38.7 | 67.0 | 59.3 |
| \$11.00 to \$12.00 | 9.8 | 22.1 | 31.3 | 2.4 | 4.7 |
| \$13.00 to \$14.00 | 0.1 | - | 0.4 | - | - |
| \$15.00 | 4.3 | 8.5 | 19.0 | - | 1.0 |
| More Than \$15.00 | 0.7 | 3.7 | 2.3 | - | - |
| Free, Included in Rent | 2.0 | 0.8 | 3.9 | 2.6 | 1.3 |
| Did Not State | 0.8 | - | 1.4 | 0.5 | 1.0 |
| Average Indoor Parking Cost | \$9.78 | \$10.93 | \$11.56 | \$9.28 | \$9.23 |

4. Is this vehicle parked on the premises (apartment property) when not in use?
 5. IF "YES", Is it parked inside or outside?
 7. How much does it cost you for parking at your residence?

COST OF OUTDOOR PARKING ON APARTMENT PREMISES

| | T o t a l | Geographical Area | | |
|-------------------------------|----------------|-------------------|-------------|---------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL VEHICLES PARKED OUTSIDE | 19,196 100% | 256 100% | 657 100% | 2,852 100% 15,431 100% |

Monthly Parking Cost:

| | | | | | |
|------------------------------|--------|--------|--------|--------|--------|
| Under \$5.00 | 26.0 | - | - | 30.7 | 26.7 |
| \$5.00 | 31.1 | 46.5 | 58.7 | 33.0 | 29.3 |
| \$6.00 to \$7.00 | 4.2 | 6.5 | 9.1 | 1.3 | 4.4 |
| \$8.00 to \$9.00 | 2.1 | 9.5 | 9.9 | 1.3 | 1.8 |
| \$10.00 | 2.0 | - | 11.2 | 1.8 | 1.7 |
| \$11.00 to \$12.00 | 0.2 | 9.5 | 3.4 | - | - |
| \$13.00 to \$14.00 | - | - | - | - | - |
| \$15.00 | - | - | - | - | - |
| More Than \$15.00 | 0.2 | - | - | - | 0.2 |
| Free, Included in Rent | 32.9 | 28.0 | 7.7 | 31.9 | 34.3 |
| Did Not State | 1.3 | - | - | - | 1.6 |
| Average Outdoor Parking Cost | \$5.01 | \$6.45 | \$6.37 | \$4.73 | \$4.96 |

T-15B

RECON

1. First, what type of apartment is this?
8. What is your monthly apartment rent, excluding any parking costs?

AVERAGE MONTHLY APARTMENT RENTAL

BY AREA AND TYPE OF APARTMENT UNIT

| | <u>T o t a l</u> | <u>Geographical Area</u> | | |
|------------------------------|------------------|--------------------------|--------------|--|
| | | <u>Central</u> | <u>Inner</u> | <u>Inter- mediate</u> <u>Outer</u> |
| <u>TOTAL NUMBER OF UNITS</u> | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| <u>Type of Apartment:</u> | | | | |
| Bachelor | \$121.23 | \$125.06 | \$123.28 | \$116.16 \$117.50 |
| One Bedroom | 141.93 | 151.25 | 153.82 | 137.67 136.70 |
| Two Bedroom | 160.88 | 193.55 | 199.44 | 163.61 151.10 |
| Three Bedroom or Larger | 178.41 | 250.00 | 260.77 | 199.25 169.60 |
| All Types | 152.53 | 156.48 | 167.94 | 149.47 149.09 |

T-16A

2.(d) Is this shared accommodation or are you all one family?
8. What is your monthly apartment rental, excluding any parking costs?

AVERAGE MONTHLY APARTMENT RENTAL

BY AREA AND TYPE OF ACCOMMODATION

| | T o t a l | Geographical Area | | |
|------------------------|-----------|-------------------|----------|------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| Type of Accommodation: | | | | |
| Shared | \$163.02 | \$165.72 | \$175.80 | \$154.54 \$153.58 |
| Family | 151.70 | 154.21 | 166.61 | 149.15 148.91 |
| Both Types | 152.53 | 156.48 | 167.94 | 149.47 149.09 |

2.(e) Now considering all working members of this household would the total income of this apartment be:
 8. What is your monthly apartment rental, excluding any parking costs?

AVERAGE MONTHLY APARTMENT RENTAL
BY AREA AND TOTAL HOUSEHOLD INCOME

| | T o t a l | Geographical Area | | |
|-----------------------|-----------|-------------------|----------|-------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| Total Income: | | | | |
| Under \$4,000 | \$139.10 | \$118.83 | \$151.00 | \$143.70 \$131.82 |
| \$4,000 to \$5,999 | 134.56 | 132.01 | 138.80 | 132.38 134.41 |
| \$6,000 to \$7,999 | 143.82 | 144.85 | 145.65 | 144.01 142.84 |
| \$8,000 to \$9,999 | 149.93 | 150.21 | 152.30 | 147.10 150.73 |
| \$10,000 to \$11,999 | 150.38 | 152.61 | 160.90 | 149.75 147.64 |
| \$12,000 to \$13,999 | 158.56 | 152.97 | 158.83 | 149.47 162.06 |
| \$14,000 or Over | 176.60 | 184.83 | 197.47 | 168.76 160.82 |
| Did not state income | 155.02 | 163.74 | 180.58 | 151.35 150.20 |
| All Households | 152.53 | 156.48 | 167.94 | 149.47 149.09 |

9. Was your apartment visited by friends or relatives last weekend, from Friday to Sunday?
10. IF "YES" What day was that?
11. (a) What time(s) did they arrive?
(b) What time(s) did they leave?
12. Did they require a place to park their car?

VISITORS' WEEKEND PARKING DEMAND EXPRESSED

AS A CUMULATIVE PERCENTAGE OF THE NUMBER OF APARTMENT UNITS

CENTRAL AREA (5,474 UNITS)

| <u>Time Period:</u> | <u>Vehicle Accumulation</u> | | |
|----------------------|-----------------------------|-----------------|---------------|
| | <u>Friday</u> | <u>Saturday</u> | <u>Sunday</u> |
| 8:00 a.m. or earlier | - | 1.8 | - |
| 9:46 - 10:00 | - | 2.7 | 3.6 |
| 10:46 - 11:00 | - | 3.4 | 3.9 |
| 11:46 - 12:00 | - | - | 4.3 |
| 12:16 - 12:30 p.m. | - | 3.8 | - |
| 12:31 - 12:45 | - | 3.4 | - |
| 12:46 - 1:00 | - | 4.4 | 6.3 |
| 1:16 - 1:30 | - | 4.5 | 7.0 |
| 1:46 - 2:00 | - | 8.0 | 9.0 |
| 2:16 - 2:30 | - | 8.8 | 9.4 |
| 2:46 - 3:00 | - | 10.0 | 10.3 |
| 3:46 - 4:00 | 1.1 | 10.6 | 11.4 |
| 4:01 - 4:15 | 0.7 | - | - |
| 4:16 - 4:30 | - | 10.3 | 11.8 |
| 4:46 - 5:00 | 1.8 | 9.5 | 11.4 |
| 5:16 - 5:30 | - | 9.2 | 11.8 |
| 5:46 - 6:00 | 2.6 | 8.9 | 12.0 |
| 6:16 - 6:30 | 3.1 | 9.3 | - |
| 6:31 - 6:45 | - | - | 12.4 |
| 6:46 - 7:00 | 6.4 | 11.9 | 12.5 |

Continued...

9. Was your apartment visited by friends or relatives last weekend, from Friday to Sunday?
10. IF "YES" What day was that?
11. (a) What time(s) did they arrive?
(b) What time(s) did they leave?
12. Did they require a place to park their car?

VISITORS' WEEKEND PARKING DEMAND EXPRESSED

AS A CUMULATIVE PERCENTAGE OF THE NUMBER OF APARTMENT UNITS

CENTRAL AREA (5,474 UNITS)

| <u>Time Period:</u> | <u>Vehicle Accumulation</u> | | |
|---------------------|-----------------------------|-----------------|---------------|
| | <u>Friday</u> | <u>Saturday</u> | <u>Sunday</u> |
| 7:16 - 7:30 p.m. | 8.2 | 12.9 | 12.9 |
| 7:31 - 7:45 | 7.8 | - | - |
| 7:46 - 8:00 | 10.1 | 16.2 | 12.3 |
| 8:01 - 8:15 | - | 15.7 | - |
| 8:16 - 8:30 | 10.2 | 16.5 | 11.5 |
| 8:31 - 8:45 | - | 16.2 | - |
| 8:46 - 9:00 | 10.6 | 16.0 | 10.5 |
| 9:16 - 9:30 | 10.3 | 15.6 | 10.1 |
| 9:46 - 10:00 | 10.4 | 14.6 | 8.7 |
| 10:16 - 10:30 | 10.2 | 14.9 | 7.5 |
| 10:46 - 11:00 | 8.4 | 12.7 | 3.6 |
| 11:01 - 11:15 | - | - | 4.0 |
| 11:16 - 11:30 | 8.5 | 11.0 | 3.3 |
| 11:31 - 11:45 | - | 11.4 | - |
| 11:46 - 12:00 | 4.6 | 9.9 | 2.2 |
| 12:16 - 12:30 a.m. | - | 9.2 | 1.9 |
| 12:46 - 1:00 | - | 6.3 | 0.3 |
| 1:16 - 1:30 | 4.0 | - | - |
| 1:46 - 2:00 | 3.4 | 4.8 | - |
| After 2:00 a.m. | 2.2 | 3.3 | 0 |

NOTE: Only those time periods in which changes in parking demand were reported are included in these tables.

9. Was your apartment visited by friends or relatives last weekend, from Friday to Sunday?
10. IF "YES" What day was that?
11. (a) What time(s) did they arrive?
(b) What time(s) did they leave?
12. Did they require a place to park their car?

VISITORS' WEEKEND PARKING DEMAND EXPRESSED

AS A CUMULATIVE PERCENTAGE OF THE NUMBER OF APARTMENT UNITS

INNER AREA (8,108 UNITS)

| <u>Time Period:</u> | <u>Vehicle Accumulation</u> | | |
|----------------------|-----------------------------|-----------------|---------------|
| | <u>Friday</u> | <u>Saturday</u> | <u>Sunday</u> |
| 8:00 a.m. or earlier | 0.3 | - | 1.8 |
| 8:16 - 8:30 | - | - | 1.4 |
| 8:46 - 9:00 | - | 1.7 | 1.9 |
| 9:01 - 9:15 | - | - | 2.2 |
| 9:46 - 10:00 | - | 1.8 | 2.5 |
| 10:16 - 10:30 | - | - | 2.2 |
| 10:46 - 11:00 | - | - | 2.0 |
| 11:16 - 11:30 | - | 2.2 | 1.7 |
| 11:46 - 12:00 | - | 2.8 | 2.1 |
| 12:46 - 1:00 p.m. | 0.5 | 3.3 | 3.1 |
| 1:01 - 1:15 | - | - | 2.7 |
| 1:16 - 1:30 | - | 3.0 | 3.2 |
| 1:46 - 2:00 | - | 4.3 | 5.8 |
| 2:46 - 3:00 | - | 4.4 | 6.4 |
| 3:16 - 3:30 | - | 4.6 | 6.7 |
| 3:46 - 4:00 | 0.3 | 5.0 | 7.1 |
| 4:16 - 4:30 | 0.6 | 5.1 | 7.4 |
| 4:46 - 5:00 | 1.1 | 6.3 | 7.9 |
| 5:01 - 5:15 | 1.3 | - | - |
| 5:16 - 5:30 | 1.5 | 6.0 | 8.0 |

Continued...

9. Was your apartment visited by friends or relatives last weekend, from Friday to Sunday?
10. IF "YES" What day was that?
11. (a) What time(s) did they arrive?
(b) What time(s) did they leave?
12. Did they require a place to park their car?

VISITORS' WEEKEND PARKING DEMAND EXPRESSED

AS A CUMULATIVE PERCENTAGE OF THE NUMBER OF APARTMENT UNITS

INNER AREA (8,108 UNITS)

| <u>Time Period:</u> | <u>Vehicle Accumulation</u> | | |
|---------------------|-----------------------------|-----------------|---------------|
| | <u>Friday</u> | <u>Saturday</u> | <u>Sunday</u> |
| 5:46 - 6:00 p.m. | 2.0 | 6.5 | 9.0 |
| 6:01 - 6:15 | - | - | 8.9 |
| 6:16 - 6:30 | - | 6.6 | 9.7 |
| 6:46 - 7:00 | 4.4 | 7.3 | 8.9 |
| 7:01 - 7:15 | - | - | 8.6 |
| 7:16 - 7:30 | 4.9 | 8.6 | 8.7 |
| 7:46 - 8:00 | 7.8 | 10.9 | 8.8 |
| 8:16 - 8:30 | 8.5 | 11.3 | - |
| 8:46 - 9:00 | 7.7 | 11.5 | 6.8 |
| 9:16 - 9:30 | 8.2 | 11.6 | 6.1 |
| 9:46 - 10:00 | 8.5 | 10.1 | 5.6 |
| 10:16 - 10:30 | 8.4 | 9.9 | 5.0 |
| 10:46 - 11:00 | 8.0 | 7.9 | 3.6 |
| 11:16 - 11:30 | 7.3 | 7.8 | 2.1 |
| 11:46 - 12:00 | 5.8 | 5.3 | 0.9 |
| 12:16 - 12:30 a.m. | 5.5 | 5.1 | - |
| 12:31 - 12:45 | - | 5.0 | - |
| 12:46 - 1:00 | 4.7 | 3.6 | 0.8 |
| 1:16 - 1:30 | 4.0 | 3.2 | - |
| 1:46 - 2:00 | 1.9 | 1.8 | 0.5 |
| After 2:00 a.m. | 1.3 | 1.1 | 0 |

9. Was your apartment visited by friends or relatives last weekend, from Friday to Sunday?
10. IF "YES" What day was that?
11. (a) What time(s) did they arrive?
(b) What time(s) did they leave?
12. Did they require a place to park their car?

VISITORS' WEEKEND PARKING DEMAND EXPRESSED

AS A CUMULATIVE PERCENTAGE OF THE NUMBER OF APARTMENT UNITS

INTERMEDIATE AREA (13,379 UNITS)

| <u>Time Period:</u> | <u>Vehicle Accumulation</u> | | |
|----------------------|-----------------------------|-----------------|---------------|
| | <u>Friday</u> | <u>Saturday</u> | <u>Sunday</u> |
| 8:00 a.m. or earlier | - | 0.9 | 0.5 |
| 8:16 - 8:30 a.m. | - | 1.0 | - |
| 8:46 - 9:00 | - | 1.5 | - |
| 9:16 - 9:30 | - | - | 0.8 |
| 9:46 - 10:00 | - | 2.0 | 1.4 |
| 10:16 - 10:30 | - | - | 1.7 |
| 10:46 - 11:00 | - | 2.7 | 1.4 |
| 11:16 - 11:30 | - | 2.9 | - |
| 11:46 - 12:00 | - | 3.3 | 1.3 |
| 12:16 - 12:30 p.m. | - | 3.0 | - |
| 12:46 - 1:00 | - | 3.8 | 1.9 |
| 1:16 - 1:30 | - | - | 2.0 |
| 1:46 - 2:00 | - | 4.3 | 2.8 |
| 2:16 - 2:30 | - | 4.5 | 3.0 |
| 2:46 - 3:00 | - | 5.6 | 4.1 |
| 3:16 - 3:30 | - | 6.3 | 4.2 |
| 3:46 - 4:00 | - | 6.4 | 4.0 |
| 4:16 - 4:30 | - | 5.9 | - |
| 4:46 - 5:00 | - | 5.4 | 4.8 |
| 5:16 - 5:30 | - | - | 4.9 |

Continued...

9. Was your apartment visited by friends or relatives last weekend, from Friday to Sunday?
10. IF "YES" What day was that?
11. (a) What time(s) did they arrive?
(b) What time(s) did they leave?
12. Did they require a place to park their car?

VISITORS' WEEKEND PARKING DEMAND EXPRESSED

AS A CUMULATIVE PERCENTAGE OF THE NUMBER OF APARTMENT UNITS

INTERMEDIATE AREA (13,379 UNITS)

| <u>Time Period:</u> | <u>Vehicle Accumulation</u> | | |
|---------------------|-----------------------------|-----------------|---------------|
| | <u>Friday</u> | <u>Saturday</u> | <u>Sunday</u> |
| 5:46 - 6:00 p.m. | 0.3 | 5.9 | 5.4 |
| 6:01 - 6:15 | 0.6 | 6.2 | - |
| 6:16 - 6:30 | - | 6.9 | 5.2 |
| 6:31 - 6:45 | 0.3 | 6.8 | 5.0 |
| 6:46 - 7:00 | 1.7 | 8.1 | 5.2 |
| 7:16 - 7:30 | 2.2 | 8.2 | 5.5 |
| 7:31 - 7:45 | - | 7.9 | - |
| 7:46 - 8:00 | 2.8 | 9.3 | 4.9 |
| 8:16 - 8:30 | 3.3 | 10.0 | - |
| 8:46 - 9:00 | 4.3 | 9.8 | 4.6 |
| 9:16 - 9:30 | 4.5 | 10.0 | 4.3 |
| 9:46 - 10:00 | 4.2 | - | 2.1 |
| 10:16 - 10:30 | 4.1 | 9.6 | 2.0 |
| 10:46 - 11:00 | 4.3 | 7.9 | 0.7 |
| 11:16 - 11:30 | 4.0 | 7.6 | 0.6 |
| 11:31 - 11:45 | - | - | 0 |
| 11:46 - 12:00 | 3.3 | 4.1 | - |
| 12:16 - 12:30 a.m. | 3.0 | 4.0 | - |
| 12:46 - 1:00 | 1.6 | 2.5 | - |
| 1:46 - 2:00 | 0.6 | 1.3 | - |
| After 2:00 a.m. | - | 0.8 | - |

9. Was your apartment visited by friends or relatives last weekend, from Friday to Sunday?
10. IF "YES" What day was that?
11. (a) What time(s) did they arrive?
(b) What time(s) did they leave?
12. Did they require a place to park their car?

VISITORS' WEEKEND PARKING DEMAND EXPRESSED

AS A CUMULATIVE PERCENTAGE OF THE NUMBER OF APARTMENT UNITS

OUTER AREA (30,794 UNITS)

| <u>Time Period:</u> | <u>Vehicle Accumulation</u> | | |
|----------------------|-----------------------------|-----------------|---------------|
| | <u>Friday</u> | <u>Saturday</u> | <u>Sunday</u> |
| 8:00 a.m. or earlier | 0.1 | 0.7 | - |
| 8:46 - 9:00 | - | 0.8 | - |
| 9:16 - 9:30 | 0.3 | - | - |
| 9:46 - 10:00 | 0.5 | 1.3 | 1.8 |
| 10:16 - 10:30 | - | 1.2 | 2.5 |
| 10:46 - 11:00 | 0.7 | 1.8 | 3.1 |
| 11:16 - 11:30 | - | 2.0 | 3.3 |
| 11:46 - 12:00 | - | 2.1 | 5.0 |
| 12:16 - 12:30 p.m. | - | - | 4.9 |
| 12:31 - 12:45 | - | 2.2 | - |
| 12:46 - 1:00 | 0.8 | 2.9 | 5.7 |
| 1:01 - 1:15 | - | 2.7 | - |
| 1:16 - 1:30 | - | 3.0 | 5.9 |
| 1:31 - 1:45 | 1.0 | - | - |
| 1:46 - 2:00 | 1.1 | 3.8 | 8.6 |
| 2:01 - 2:15 | 1.0 | - | 8.4 |
| 2:16 - 2:30 | - | 3.7 | 8.6 |
| 2:46 - 3:00 | - | 4.9 | 10.4 |
| 3:16 - 3:30 | - | - | 10.9 |
| 3:31 - 3:45 | - | - | 11.0 |
| 3:46 - 4:00 | - | 4.7 | 12.0 |
| 4:16 - 4:30 | - | 4.6 | 11.6 |
| 4:46 - 5:00 | 1.7 | 5.2 | 10.7 |
| 5:01 - 5:15 | - | - | 11.0 |
| 5:16 - 5:30 | 2.0 | 5.0 | 10.9 |

Continued...

9. Was your apartment visited by friends or relatives last weekend, from Friday to Sunday?
10. IF "YES" What day was that?
11. (a) What time(s) did they arrive?
(b) What time(s) did they leave?
12. Did they require a place to park their car?

VISITORS' WEEKEND PARKING DEMAND EXPRESSED

AS A CUMULATIVE PERCENTAGE OF THE NUMBER OF APARTMENT UNITS

OUTER AREA (30,794 UNITS)

| <u>Time Period:</u> | <u>Vehicle Accumulation</u> | | |
|---------------------|-----------------------------|-----------------|---------------|
| | <u>Friday</u> | <u>Saturday</u> | <u>Sunday</u> |
| 5:46 - 6:00 p.m. | 2.2 | 5.4 | 11.2 |
| 6:16 - 6:30 | - | 5.9 | - |
| 6:46 - 7:00 | 4.1 | 8.8 | 10.4 |
| 7:16 - 7:30 | 4.8 | 8.9 | 10.1 |
| 7:31 - 7:45 | - | 9.2 | - |
| 7:46 - 8:00 | 5.6 | 11.0 | 8.5 |
| 8:01 - 8:15 | - | 11.2 | - |
| 8:16 - 8:30 | 5.8 | 12.5 | 8.6 |
| 8:31 - 8:45 | 5.9 | - | - |
| 8:46 - 9:00 | 6.9 | 12.4 | 7.8 |
| 9:16 - 9:30 | 6.6 | - | 7.6 |
| 9:31 - 9:45 | - | - | 7.2 |
| 9:46 - 10:00 | 5.6 | 11.7 | 6.4 |
| 10:16 - 10:30 | - | 10.8 | 6.2 |
| 10:31 - 10:45 | 5.5 | 10.5 | - |
| 10:46 - 11:00 | 4.6 | 8.8 | 4.5 |
| 11:16 - 11:30 | 4.2 | 7.8 | 2.9 |
| 11:31 - 11:45 | 4.0 | - | 3.0 |
| 11:46 - 12:00 | 2.9 | 5.3 | 0.7 |
| 12:16 - 12:30 a.m. | 2.6 | 5.0 | 0.6 |
| 12:46 - 1:00 | 1.2 | 3.2 | 0.5 |
| 1:16 - 1:30 | - | 2.9 | - |
| 1:46 - 2:00 | 1.3 | 2.3 | - |
| After 2:00 a.m. | 0.5 | 1.4 | 0 |

9. Was your apartment visited by friends or relatives last weekend, from Friday to Sunday?
 12. Did they require a place to park their car?
 13. IF "YES", where did they park their car?

PARKING ARRANGEMENTS FOR VISITORS' CARS

| | Total | Geographical Area | | |
|------------------------|----------------|-------------------|---------------|---------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| ALL VISITORS' VEHICLES | 25,259 100% | 3,442 100% | 3,957 100% | 4,690 100% 13,160 100% |

Where Parked

| | | | | | |
|-----------------------|------|------|------|------|------|
| On Apartment Premises | 46.8 | 40.4 | 55.9 | 55.3 | 43.0 |
| On Nearby Street | 46.3 | 52.8 | 42.2 | 42.5 | 46.9 |
| On Nearby Parking Lot | 5.4 | 5.4 | 1.3 | 1.9 | 8.0 |
| Other Location | 1.5 | 1.4 | 0.6 | 0.3 | 2.1 |

Average Number of Visitors'
 Vehicles Per Apartment Unit

| | | | | |
|------|------|------|------|------|
| 0.44 | 0.63 | 0.49 | 0.35 | 0.43 |
|------|------|------|------|------|

I'd like to ask you about trips made yesterday by members of your household between 7:00 a.m. and 9:00 a.m.

AVERAGE NUMBER OF WEEKDAY MORNING TRIPS (7:00-9:00 A.M.)

GENERATED BY AREA AND TYPE OF APARTMENT UNIT

| | T o t a l | Geographical Area | | |
|-------------------------|-----------|-------------------|-------|------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| Type of Apartment: | | | | |
| Bachelor | 0.91 | 0.90 | 0.87 | 0.98 0.79 |
| One Bedroom | 1.20 | 1.26 | 1.06 | 1.28 1.19 |
| Two Bedroom | 1.30 | 1.70 | 1.30 | 1.33 1.27 |
| Three Bedroom or Larger | 1.71 | - | 1.42 | 1.53 1.76 |
| All Types | 1.28 | 1.30 | 1.13 | 1.29 1.32 |

I'd like to ask you about trips made yesterday by members of your household between 7:00 and 9:00 a.m.

AVERAGE NUMBER OF WEEKDAY MORNING TRIPS (7:00-9:00 A.M.)

GENERATED BY AREA AND SIZE OF BUILDING

| | T o t a l | Geographical Area | | |
|--------------------------|-----------|-------------------|-------|------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| <u>Size of Building:</u> | | | | |
| 100 Units or Less | 1.17 | 1.10 | 0.80 | 1.29 1.17 |
| 101 - 125 Units | 1.30 | 1.33 | 1.01 | 1.37 1.29 |
| 126 - 150 Units | 1.42 | - | 1.02 | 1.22 1.53 |
| 151 - 175 Units | 1.45 | 1.41 | 1.06 | 1.60 1.57 |
| 176 - 200 Units | 1.19 | 1.22 | 1.23 | 1.07 1.21 |
| 201 - 225 Units | 1.33 | 1.11 | 1.09 | 1.50 1.40 |
| 226 - 250 Units | 1.45 | 1.41 | 1.30 | 1.46 1.51 |
| 251 - 275 Units | 1.20 | 1.32 | 1.17 | 0.98 1.25 |
| 276 - 300 Units | 1.13 | - | 1.26 | 1.09 1.00 |
| 301 - 325 Units | 1.42 | - | - | 1.32 1.59 |
| 326 - 350 Units | 1.33 | - | - | 1.21 1.39 |
| More than 350 Units | 1.29 | 1.55 | 1.27 | 1.15 - |
| All Buildings | 1.28 | 1.30 | 1.13 | 1.29 1.32 |

I'd like to ask you about trips made yesterday by members of your household between 7:00 a.m. and 9:00 a.m.?
16. What method of transportation did you use?

DISTRIBUTION OF WEEKDAY MORNING TRIPS (7:00-9:00 A.M.)

BY AREA AND MODE OF TRANSPORTATION

| | Geographical Area | | | | |
|------------------------------|-------------------|---------------|---------------|-------------------|----------------|
| | T o t a l | Central | Inner | Inter- mediate | Outer |
| TOTAL TRIPS GENERATED (A.M.) | 74,148 100% | 7,091 100% | 9,124 100% | 17,233 100% | 40,700 100% |
| Mode of Transportation: | | | | | |
| Auto Driver | 47.3 | 18.3 | 32.4 | 43.5 | 57.4 |
| Auto Passenger (Own Car) | 7.7 | 2.5 | 5.5 | 6.6 | 9.5 |
| Auto Passenger (Car Pool) | 5.4 | 1.9 | 2.6 | 4.5 | 7.1 |
| Taxi | 0.2 | 0.5 | 0.3 | 0.3 | - |
| Public Transport | 29.3 | 48.6 | 50.0 | 38.7 | 17.3 |
| Walk Only | 10.1 | 28.2 | 9.2 | 6.4 | 8.7 |

I'd like to ask you about trips made yesterday by members of your household between 7:00 a.m. and 9:00 a.m.
15. What time did you start from home?

DEPARTURE TIME OF MORNING WEEKDAY TRIPS (7:00-9:00 A.M.)

| | T o t a l | Geographical Area | | | |
|------------------------------|----------------|-------------------|---------------|-------------------|----------------|
| | | Central | Inner | Inter- mediate | Outer |
| TOTAL TRIPS GENERATED (A.M.) | 74,148 100% | 7,091 100% | 9,124 100% | 17,233 100% | 40,700 100% |
| Time of Departure. | 7:00 a.m. | 9.1 | 4.3 | 12.7 | 9.8 |
| | 7:05 | 0.2 | 0.3 | - | 0.1 |
| | 7:10 | 0.3 | 1.1 | - | 1.0 |
| | 7:15 | 0.3 | 1.2 | 3.1 | 3.3 |
| | 7:20 | - | 0.5 | 0.9 | 1.2 |
| | 7:25 | - | - | - | 0.2 |
| | 7:30 | 9.1 | 11.2 | 14.3 | 17.0 |
| | 7:35 | - | - | 0.5 | 0.2 |
| | 7:40 | 1.0 | 0.5 | 1.0 | 0.9 |
| | 7:45 | 2.7 | 6.0 | 4.0 | 6.1 |
| | 7:50 | 0.5 | 2.0 | 2.5 | 1.1 |
| | 7:55 | 0.6 | 0.5 | 0.1 | 0.3 |
| | 8:00 | 21.6 | 24.1 | 26.7 | 23.0 |
| | 8:05 | - | 0.4 | - | 0.3 |
| | 8:10 | 2.3 | 1.7 | 1.4 | 1.0 |
| | 8:15 | 8.8 | 8.3 | 8.3 | 4.7 |
| | 8:20 | 0.9 | 2.0 | 1.8 | 1.6 |
| | 8:25 | 0.3 | 1.6 | 0.1 | 0.1 |
| | 8:30 | 16.1 | 18.6 | 9.8 | 17.7 |
| | 8:35 | 0.2 | 0.7 | 0.1 | - |
| | 8:40 | 0.7 | 0.6 | 1.2 | 0.4 |
| | 8:45 | 4.3 | 5.1 | 4.5 | 3.6 |
| | 8:50 | 0.5 | 0.7 | 0.3 | 0.4 |
| | 8:55 | 0.5 | 0.3 | 1.0 | 0.2 |
| | 9:00 | 6.5 | 8.2 | 5.7 | 5.8 |

T-19D

2.(a) How many people including yourself, live in your household?

I'd like to ask about trips made yesterday by members of your household between 7:00 a.m. and 9:00 a.m.

AVERAGE NUMBER OF WEEKDAY MORNING TRIPS (7:00-9:00 A.M.)

GENERATED PER RESIDENT

| | T o t a l | Geographical Area | | |
|-----------------------|-----------|-------------------|-------|-------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |

Type of Apartment Units:

| | | | | | |
|-------------------------|------|------|------|------|------|
| Bachelor | 0.78 | 0.76 | 0.81 | 0.79 | 0.66 |
| One Bedroom | 0.66 | 0.71 | 0.65 | 0.70 | 0.61 |
| Two Bedroom | 0.47 | 0.67 | 0.56 | 0.49 | 0.43 |
| Three Bedroom or Larger | 0.43 | - | 0.52 | 0.48 | 0.43 |
| All Types | 0.53 | 0.70 | 0.62 | 0.59 | 0.48 |

1. First, what type of apartment is this?
19. Did you return to your apartment between 7 a.m and 9 a.m.?
22. Did any friends or relatives come to your apartment between 7 a.m. and 9 a.m. or were any residents picked up by a car pool?

AVERAGE NUMBER OF ATTRACTED TRIPS (7:00 - 9:00 A.M.)

BY AREA AND TYPE OF APARTMENT UNIT

| | T o t a l | Geographical Area | | |
|-----------------------|-----------|-------------------|-------|-------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |

Type of Apartment:

| | | | | | |
|-------------------------|------|------|------|------|------|
| Bachelor | 0.03 | 0.03 | 0.04 | 0.02 | - |
| One Bedroom | 0.07 | 0.03 | 0.04 | 0.07 | 0.10 |
| Two Bedroom | 0.08 | 0.06 | 0.03 | 0.07 | 0.09 |
| Three Bedroom or Larger | 0.06 | - | 0.12 | 0.09 | 0.07 |
| All Types | 0.07 | 0.04 | 0.04 | 0.07 | 0.09 |

19. Did you return to your apartment between 7 a.m. and 9 a.m.?
 22. Did any friends or relatives come to your apartment between 7 a.m. and 9 a.m. or were any residents picked up by a car pool?

AVERAGE NUMBER OF ATTRACTED TRIPS (7:00 - 9:00 A.M.)

BY AREA AND SIZE OF BUILDING

| | T o t a l | Geographical Area | | |
|-----------------------|-----------|-------------------|-------|-------------------|
| | | Central | Inner | Inter- mediate |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 |
| | | | | 30,794 |
| Size of Building: | | | | |
| 100 Units or Less | 0.08 | 0.04 | 0.03 | 0.06 |
| 101 - 125 Units | 0.07 | 0.06 | 0.04 | 0.08 |
| 126 - 150 Units | 0.10 | - | 0.03 | - |
| 151 - 175 Units | 0.06 | - | 0.05 | 0.07 |
| 176 - 200 Units | 0.04 | 0.10 | - | 0.02 |
| 201 - 225 Units | 0.11 | 0.08 | 0.04 | 0.06 |
| 226 - 250 Units | 0.05 | 0.02 | 0.08 | 0.16 |
| 251 - 275 Units | 0.08 | - | 0.07 | 0.18 |
| 276 - 300 Units | 0.06 | - | 0.02 | 0.05 |
| 301 - 325 Units | 0.05 | - | - | 0.03 |
| 326 - 350 Units | 0.21 | - | - | 0.31 |
| More Than 350 Units | 0.02 | 0.02 | 0.01 | 0.02 |
| All Buildings | 0.07 | 0.04 | 0.04 | 0.07 |
| | | | | 0.09 |

T-21B

19. Did you return to your apartment between 7 a.m. and 9 a.m.?
 IF "YES", What method of transportation did you use?
 22. Did any friends or relatives come to your apartment between 7 a.m. and 9 a.m. or were any residents picked up by a car pool?
 23. What method of transportation did they use?

MODE USED FOR ATTRACTED TRIPS (7:00 - 9:00 A.M.)

| | T o t a l | Geographical Area | | |
|---------------------------------|---------------|-------------------|-------------|------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF ATTRACTED TRIPS | 4,146 100% | 218 100% | 305 100% | 866 100% 2,757 100% |

Mode:

| | | | | | |
|-----------------------|------|------|------|------|------|
| Automobile Driver | 46.1 | 17.4 | 32.3 | 41.0 | 51.5 |
| Automobile Passenger | 0.5 | 10.2 | - | - | - |
| Automobile Car Pool | 42.1 | 30.9 | 37.1 | 38.4 | 44.5 |
| Public Transportation | 8.0 | 15.9 | 22.7 | 13.8 | 4.0 |
| Walk Only | 3.3 | 25.6 | 7.9 | 6.8 | - |

I'd like to ask you about trips made yesterday by members of your household between 4:00 p.m. and 7:00 p.m.

AVERAGE NUMBER OF WEEKDAY EVENING TRIPS (4:00-7:00 P.M.)

ATTRACTED BY AREA AND TYPE OF APARTMENT UNIT

| | Geographical Area | | | |
|-------------------------|-------------------|---------|-------|-------------------------|
| | Total | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,476 | 8,108 | 13,379 30,794 |
| Type of Apartment Unit | | | | |
| Bachelor | 0.86 | 0.95 | 0.77 | 0.91 0.70 |
| One Bedroom | 1.22 | 1.32 | 1.12 | 1.31 1.17 |
| Two Bedroom | 1.33 | 1.75 | 1.39 | 1.33 1.28 |
| Three Bedroom or Larger | 1.60 | - | 1.60 | 1.57 1.61 |
| All Types | 1.28 | 1.35 | 1.17 | 1.30 1.30 |

T-22A

I'd like to ask you about trips made yesterday by members of your household between 4:00 p.m. and 7:00 p.m.

AVERAGE NUMBER OF WEEKDAY EVENING TRIPS (4:00-7:00 P.M.)

ATTRACTED BY AREA AND SIZE OF BUILDING

| | T o t a l | Geographical Area | | |
|--------------------------|-----------|-------------------|-------|------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| <u>Size of Building:</u> | | | | |
| 100 Units or Less | 1.17 | 1.22 | 1.03 | 1.34 1.12 |
| 101 - 125 Units | 1.35 | 1.32 | 1.17 | 1.41 1.34 |
| 126 - 150 Units | 1.42 | - | 1.00 | 1.37 1.50 |
| 151 - 175 Units | 1.41 | 1.58 | 0.96 | 1.52 1.55 |
| 176 - 200 Units | 1.24 | 1.30 | 1.08 | 1.10 1.28 |
| 201 - 225 Units | 1.29 | 1.18 | 1.18 | 1.47 1.29 |
| 226 - 250 Units | 1.35 | 1.41 | 1.45 | 1.46 1.27 |
| 251 - 275 Units | 1.23 | 1.32 | 1.23 | 0.82 1.29 |
| 276 - 300 Units | 1.10 | - | 1.33 | 0.96 1.00 |
| 301 - 325 Units | 1.35 | - | - | 1.29 1.45 |
| 326 - 350 Units | 1.39 | - | - | 1.15 1.56 |
| More than 350 Units | 1.30 | 1.53 | 1.29 | 1.17 - |
| All Buildings | 1.28 | 1.35 | 1.17 | 1.30 1.30 |

I'd like to ask you about trips made yesterday by members of your household between 4:00 p.m. and 7:00 p.m.
 25. What method of transportation did you use?

DISTRIBUTION OF WEEKDAY EVENING TRIPS (4:00-7:00 P.M.)

BY AREA AND MODE OF TRANSPORTATION

| | T o t a l | Geographical Area | | |
|------------------------------|----------------|-------------------|---------------|----------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL TRIPS ATTRACTED (P.M.) | 74,142 100% | 7,376 100% | 9,513 100% | 17,387 100% 39,866 100% |
| Mode of Transportation: | | | | |
| Auto Driver | 44.0 | 17.1 | 33.2 | 39.0 53.6 |
| Auto Passenger (Own Car) | 6.8 | 2.3 | 4.8 | 7.0 8.0 |
| Auto Passenger (Car Pool) | 6.3 | 2.4 | 3.1 | 5.4 8.3 |
| Taxi | 0.5 | 0.2 | 0.8 | 0.9 0.3 |
| Public Transport | 30.7 | 46.9 | 47.7 | 39.7 19.8 |
| Walk Only | 11.7 | 31.1 | 10.4 | 8.0 10.0 |

I'd like to ask you about trips made yesterday by members of your household between 4:00 p.m. and 7:00 p.m.
 24. What time did you arrive home in the evening?

ARRIVAL TIME OF WEEKDAY EVENING TRIPS (4:00-7:00 P.M.)

| Time of Arrival | T o t a l | Geographical Area | | | |
|------------------------------|----------------|-------------------|---------------|-------------------|----------------|
| | | Central | Inner | Inter- mediate | Outer |
| TOTAL TRIPS ATTRACTED (P.M.) | 74,142 100% | 7,367 100% | 9,513 100% | 17,387 100% | 39,866 100% |
| 4:00 p.m. | 9.0 | 9.2 | 5.2 | 6.5 | 10.8 |
| 4:10 | 0.3 | 0.7 | - | 0.2 | 0.3 |
| 4:15 | 1.2 | 1.1 | 0.3 | 0.9 | 1.6 |
| 4:20 | 0.5 | - | 0.2 | 0.1 | 0.8 |
| 4:30 | 9.2 | 7.6 | 7.5 | 8.1 | 10.3 |
| 4:35 | 0.0 | - | 0.4 | - | - |
| 4:40 | 0.4 | - | 0.2 | - | 0.7 |
| 4:45 | 3.2 | 3.4 | 3.2 | 3.1 | 3.2 |
| 4:50 | 0.6 | 1.2 | 1.8 | - | 0.5 |
| 4:55 | 0.1 | - | 0.4 | 0.3 | - |
| 5:00 | 19.5 | 20.8 | 17.0 | 20.8 | 19.2 |
| 5:05 | 0.3 | 0.3 | 0.4 | - | 0.5 |
| 5:10 | 1.0 | 0.9 | 1.2 | 0.6 | 1.2 |
| 5:15 | 3.9 | 4.2 | 5.4 | 3.3 | 3.7 |
| 5:20 | 0.9 | 2.1 | 0.7 | 0.9 | 0.7 |
| 5:25 | 0.1 | - | 0.5 | 0.2 | - |
| 5:30 | 15.6 | 19.8 | 17.1 | 17.3 | 13.9 |
| 5:35 | 0.3 | 0.2 | 0.4 | 0.3 | 0.3 |
| 5:40 | 0.5 | 0.3 | 0.5 | 0.6 | 0.5 |
| 5:45 | 4.6 | 2.5 | 5.8 | 5.8 | 4.2 |
| 5:50 | 0.2 | 0.4 | - | 0.2 | 0.1 |

Continued...

24. I'd like to ask you about trips made yesterday by members of your household between 4:00 p.m. and 7:00 p.m.
 What time did you arrive home in the evening?

ARRIVAL TIME OF WEEKDAY EVENING TRIPS (4:00-7:00 P.M.)

(Continued)

| | T o t a l | Geographical Area | | |
|------------------------------|----------------|-------------------|---------------|-------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL TRIPS ATTRACTED (P.M.) | 74,142 100% | 7,367 100% | 9,513 100% | 17,387 100% |
| 6:00 p.m. | 15.8 | 16.1 | 16.0 | 14.3 |
| 6:05 | 0.1 | - | 0.6 | 0.1 |
| 6:10 | 0.1 | 0.2 | 0.2 | 0.2 |
| 6:15 | 1.6 | 1.6 | 1.6 | 1.3 |
| 6:20 | 0.7 | 1.3 | 0.7 | 0.9 |
| 6:25 | 0.0 | - | 0.2 | - |
| 6:30 | 6.4 | 4.4 | 5.4 | 7.5 |
| 6:35 | 0.0 | - | 0.3 | - |
| 6:40 | 0.1 | - | - | 0.1 |
| 6:45 | 0.7 | - | 2.1 | 0.4 |
| 6:50 | 0.0 | - | - | - |
| 7:00 | 3.1 | 1.7 | 4.7 | 2.7 |

26. Did you go out again between 4:00 p.m. and 7:00 p.m.?
34. Did you have any visitors who left between 4:00 p.m. and 7:00 p.m.?

AVERAGE NUMBER OF GENERATED TRIPS* (4:00-7:00 P.M.)

BY AREA AND TYPE OF APARTMENT UNIT

| | T o t a l | Geographical Area | | |
|-------------------------|-----------|-------------------|-------|------------------------------|
| | | Central | Inner | Inter- mediate Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| Type of Apartment: | | | | |
| Bachelor | 0.18 | 0.28 | 0.16 | 0.12 0.10 |
| One Bedroom | 0.31 | 0.29 | 0.23 | 0.33 0.34 |
| Two Bedroom | 0.30 | 0.43 | 0.22 | 0.26 0.31 |
| Three Bedroom or Larger | 0.36 | - | 0.26 | 0.18 0.39 |
| All Types | 0.30 | 0.32 | 0.22 | 0.28 0.33 |

* Evening trips generated include those made both by residents and by visitors.

26. Did you go out again between 4:00 p.m. and 7:00 p.m.?
34. Did you have any visitors who left between 4:00 p.m. and 7:00 p.m.?

AVERAGE NUMBER OF GENERATED TRIPS (4:00-7:00 P.M.)

BY AREA AND SIZE OF BUILDING

| | Geographical Area | | | |
|--------------------------|-------------------|---------|-------|------------------------------|
| | T o t a l | Central | Inner | Inter- mediate Outer |
| TOTAL, NUMBER OF UNITS | 57,755 | 5,474 | 8,108 | 13,379 30,794 |
| <u>Size of Building:</u> | | | | |
| 100 Units or Less | 0.29 | 0.27 | 0.26 | 0.20 0.32 |
| 101 - 125 Units | 0.34 | 0.43 | 0.34 | 0.41 0.30 |
| 126 - 150 Units | 0.35 | - | 0.16 | 0.23 0.41 |
| 151 - 175 Units | 0.31 | 0.39 | 0.19 | 0.31 0.35 |
| 176 - 200 Units | 0.32 | 0.38 | 0.14 | 0.42 0.31 |
| 201 - 225 Units | 0.28 | 0.30 | 0.16 | 0.29 0.31 |
| 226 - 250 Units | 0.31 | 0.30 | 0.19 | 0.24 0.36 |
| 251 - 275 Units | 0.24 | 0.22 | 0.23 | - 0.30 |
| 276 - 300 Units | 0.19 | - | 0.23 | 0.17 0.15 |
| 301 - 325 Units | 0.44 | - | - | 0.26 0.77 |
| 326 - 350 Units | 0.21 | - | - | 0.18 0.22 |
| More Than 350 Units | 0.29 | 0.37 | 0.23 | 0.30 - |
| All Buildings | 0.30 | 0.32 | 0.22 | 0.28 0.33 |

26. Did you go out again between 4:00 p.m. and 7:00 p.m?
 28. What method of transportation did you use?
 34. Did you have any visitors who left between 4:00 p.m. and 7:00 p.m.?
 36. What method of transportation did they use?

MODE USED FOR GENERATED TRIPS (4:00-7:00 P.M.)

| | T o t a l | Geographical Area | | |
|---------------------------------|----------------|-------------------|------------------|----------------|
| | | Central | Inner mediate | Outer |
| TOTAL NUMBER OF GENERATED TRIPS | 17,495 100% | 1,745 100% | 1,768 100% | 10,289 100% |
| Mode of Transportation: | | | | |
| Auto Driver | 50.9 | 30.9 | 41.0 | 55.0 |
| Auto Passenger (Own Car) | 20.1 | 10.2 | 10.5 | 23.5 |
| Auto Passenger (Car Pool) | 5.2 | 5.9 | 3.6 | 5.8 |
| Taxi | 1.2 | 5.3 | 4.6 | - |
| Public Transport | 10.6 | 14.2 | 27.6 | 7.2 |
| Walk Only | 12.0 | 33.5 | 12.7 | 8.5 |

3. How many vehicles (including both cars and trucks) are owned or leased and driven by members of your household and normally parked at this address?

AVERAGE NUMBER OF VEHICLES OWNED OR LEASED BY HOUSEHOLD MEMBERS

BY TYPE OF APARTMENT UNIT AND PROXIMITY TO TRANSIT

| | Geographical Area and Proximity to Transit | | | | | | |
|-----------------------|--|---------|--------------------|---------------------|--------------------|---------------------|--------|
| | T o t a l | Central | Inner | | | Intermediate | |
| | | | Transit Related | Transit Oriented | Transit Related | Transit Oriented | Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 6,325 | 2,309 | 1,175 | 9,193 | 30,794 |

Type of Apartment:

| | | | | | | | | |
|-------------------------|------|------|------|------|------|------|------|------|
| Bachelor | 0.41 | 0.23 | 0.43 | 0.60 | 0.56 | 0.51 | 0.36 | 0.60 |
| One Bedroom | 0.80 | 0.58 | 0.58 | 0.65 | 0.75 | 0.72 | 1.05 | 0.97 |
| Two Bedroom | 1.00 | 0.71 | 0.94 | 1.06 | 0.72 | 0.84 | 0.97 | 1.07 |
| Three Bedroom or Larger | 1.37 | 1.00 | 1.34 | 1.26 | - | 1.36 | 1.30 | 1.38 |
| All Types | 0.92 | 0.55 | 0.67 | 0.88 | 0.72 | 0.78 | 1.01 | 1.08 |

4. Is this vehicle parked on the premises (apartment property) when not in use?
 5. IF "YES": Is it parked inside or outside?
 6. IF "NO" Where do you usually park it?

TENANT PARKING ACCOMMODATION FOR ALL TENANT VEHICLES

BY PROXIMITY TO TRANSIT

| | Geographical Area and Proximity to Transit | | | | | | | | | |
|--------------------------|--|---------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------|-------|-------|
| | T o t a l | Central | Inner | | Intermediate | | Outer | | Other | Outer |
| | | | Transit Related | Transit Oriented | Transit Related | Transit Oriented | Transit Related | Transit Oriented | | |
| TOTAL NUMBER OF VEHICLES | 53,155 100% | 3,010 100% | 3,998 100% | 1,920 100% | 892 100% | 7,559 100% | 2,519 100% | 33,257 100% | | |
| Parking Accommodation: | | | | | | | | | | |
| On Premises: | | | | | | | | | | |
| Inside | 96.9 | 95.5 | 97.1 | 98.9 | 100.0 | 97.8 | 97.2 | 96.6 | | |
| Outside | 61.0 | 87.0 | 83.8 | 94.5 | 100.0 | 76.2 | 45.1 | 50.2 | | |
| | 35.9 | 8.5 | 13.3 | 4.4 | - | 21.6 | 52.1 | 46.4 | | |
| Off Premises: | 3.1 | 4.5 | 2.9 | 1.1 | - | 2.2 | 2.8 | 3.4 | | |
| On street | 0.9 | 2.8 | 1.5 | 1.1 | - | 0.7 | 1.4 | 0.7 | | |
| On private lot | 1.8 | 0.5 | - | - | - | 1.5 | 1.4 | 2.4 | | |
| In private garage | 0.3 | 1.2 | 1.2 | - | - | - | - | 0.2 | | |
| Other | 0.1 | - | 0.2 | - | - | - | - | 0.1 | | |

16. I'd like to ask you about trips made yesterday by members of your household between 7:00 a.m. and 9:00 a.m. What method of transportation did you use?

DISTRIBUTION OF WEEKDAY MORNING TRIPS (7:00-9:00 A.M.)

BY PROXIMITY TO TRANSIT AND MODE OF TRANSPORTATION

| | T o t a l | Geographical Area and Proximity to Transit | | | | | | | |
|-----------------------------|----------------|--|---------------------|--------------------|---------------------|--------------------|---------------------|---------------|----------------|
| | | Central | | Inner | | Intermediate | | Outer | |
| | | | | | | | | | |
| | | Transit Related | Transit Oriented | Transit Related | Transit Oriented | Transit Related | Transit Oriented | Other | Other |
| TOTAL TRIPS GENERATED(A.M.) | 74,148 100% | 7,091 100% | 2,457 100% | 7,354 100% | 2,457 100% | 1,856 100% | 11,381 100% | 3,309 100% | 40,700 100% |

Mode of Transportation:

| | | | | | | | | | |
|---------------------------|------|------|------|------|------|------|------|------|------|
| Auto Driver | 47.3 | 18.3 | 42.5 | 28.3 | 42.5 | 26.5 | 44.0 | 54.7 | 57.4 |
| Auto Passenger (Own Car) | 7.7 | 2.5 | 9.3 | 4.2 | 9.3 | 4.3 | 5.3 | 12.6 | 9.5 |
| Auto Passenger (Car Pool) | 5.4 | 1.9 | 6.1 | 1.6 | 6.1 | 2.2 | 4.5 | 5.8 | 7.1 |
| Taxi | 0.2 | 0.5 | - | 0.4 | - | - | 0.1 | 1.1 | - |
| Public Transport | 29.3 | 48.6 | 34.5 | 56.7 | 34.5 | 61.5 | 39.5 | 18.0 | 17.3 |
| Walk Only | 10.1 | 28.2 | 7.6 | 8.8 | 7.6 | 5.5 | 6.6 | 7.8 | 8.7 |

I'd like to ask you about trips made yesterday by members of your household between 7:00 a.m. and 9:00 a.m.

AVERAGE NUMBER OF WEEKDAY MORNING TRIPS (7:00-9:00 A.M.)

GENERATED BY TYPE OF UNIT AND PROXIMITY TO TRANSIT

| | Geographical Area and Proximity to Transit | | | | | | | |
|-----------------------|--|---------|--------------------|---------------------|--------------------|---------------------|-------|--------|
| | T o t a l | Central | Inner | | Intermediate | | Other | Outer |
| | | | Transit Related | Transit Oriented | Transit Related | Transit Oriented | | |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 6,325 | 2,309 | 1,175 | 9,193 | 2,485 | 30,794 |

Type of Apartment:

| | | | | | | | | |
|-------------------------|------|------|------|------|------|------|------|------|
| Bachelor | 0.91 | 0.90 | 0.85 | 0.90 | 1.00 | 0.97 | 1.00 | 0.79 |
| One Bedroom | 1.20 | 1.26 | 1.16 | 0.81 | 1.60 | 1.18 | 1.50 | 1.19 |
| Two Bedroom | 1.30 | 1.70 | 1.34 | 1.23 | 1.71 | 1.34 | 1.20 | 1.27 |
| Three Bedroom or Larger | 1.71 | - | 1.36 | 1.55 | - | 1.50 | 1.51 | 1.76 |
| All Types | 1.28 | 1.30 | 1.16 | 1.07 | 1.56 | 1.24 | 1.33 | 1.32 |

25. I'd like to ask you about trips made yesterday by members of your household between 4:00 p.m. and 7:00 p.m.
 25. What method of transportation did you use?

DISIRIBUTION OF WEEKDAY EVENING TRIPS (4:00-7:00 P.M.)

BY PROXIMITY TO TRANSIT AND MODE OF TRANSPORTATION

| | Geographical Area and Proximity to Transit | | | | | | | | | |
|------------------------------|--|---------------|-----------------|------------------|------------------|------------------|-----------------|------------------|-------|-------|
| | T o t a l | Central | Intermediate | | | | | | | |
| | | | Inner | | Transit Oriented | | | | Other | Outer |
| | | | Transit Related | Transit Oriented | Transit Related | Transit Oriented | Transit Related | Transit Oriented | | |
| TOTAL TRIPS ATTRACTED (P.M.) | | | | | | | | | | |
| | 74,142 100% | 7,376 100% | 7,814 100% | 2,377 100% | 1,717 100% | 11,802 100% | 3,190 100% | 39,866 100% | | |
| Mode of Transportation: | | | | | | | | | | |
| Auto Driver | 44.0 | 17.1 | 30.2 | 40.3 | 25.0 | 38.3 | 51.6 | 53.6 | | |
| Auto Passenger (Own Car) | 6.8 | 2.3 | 3.7 | 7.9 | 4.6 | 5.9 | 13.8 | 8.0 | | |
| Auto Passenger (Car Pool) | 6.3 | 2.4 | 2.3 | 6.3 | 2.3 | 5.1 | 8.4 | 8.3 | | |
| Taxi | 0.5 | 0.2 | 0.9 | - | - | 1.1 | 1.1 | 0.3 | | |
| Public Transport | 30.7 | 46.9 | 52.8 | 36.8 | 63.6 | 40.5 | 17.7 | 19.8 | | |
| Walk Only | 11.7 | 31.1 | 10.1 | 8.7 | 4.5 | 9.1 | 7.4 | 10.0 | | |

I'd like to ask you about trips made yesterday by members of your household between 4:00 p.m. and 7:00 p.m.

AVERAGE NUMBER OF WEEKDAY EVENING TRIPS (4:00-7:00 P.M.)

BY TYPE OF UNIT AND PROXIMITY TO TRANSIT

| | Geographical Area and Proximity to Transit | | | | | | | |
|---------------------------|--|---------|--------------------|---------------------|--------------------|---------------------|-------|--------|
| | T o t a l | Central | Inner | | | Intermediate | | |
| | | | Transit Related | Transit Oriented | Transit Related | Transit Oriented | Other | Outer |
| TOTAL NUMBER OF UNITS | 57,755 | 5,474 | 6,325 | 2,309 | 1,175 | 9,193 | 2,485 | 30,794 |
| <u>Type of Apartment:</u> | | | | | | | | |
| Bachelor | 0.86 | 0.95 | 0.77 | 0.80 | 0.67 | 0.97 | 0.71 | 0.70 |
| One Bedroom | 1.22 | 1.32 | 1.23 | 0.80 | 1.60 | 1.24 | 1.38 | 1.17 |
| Two Bedroom | 1.33 | 1.75 | 1.50 | 1.16 | 1.43 | 1.37 | 1.18 | 1.28 |
| Three Bedroom or Larger | 1.60 | - | 1.56 | 1.68 | - | 1.47 | 1.76 | 1.61 |
| All Types | 1.28 | 1.35 | 1.24 | 1.02 | 1.46 | 1.28 | 1.29 | 1.30 |

3. How many vehicles (including both cars and trucks) are owned or leased and driven by members of your household and normally parked at this address?

AVERAGE NUMBER OF VEHICLES OWNED OR LEASED BY HOUSEHOLD MEMBERS

BY TYPE OF APARTMENT AND BOROUGH

| | T o t a l | B o r o u g h | | | | | E t o b i c o k e |
|-----------------------|-----------|--------------------|-----------|----------|---------------|-------|-------------------|
| | | City of Toronto | East York | Scarboro | North York | York | |
| TOTAL NUMBER OF UNITS | 57,755 | 16,387 | 4,817 | 7,832 | 18,849 | 2,678 | 7,192 |

Type of Apartment :

| | | | | | | | |
|-------------------------|------|------|------|------|------|------|------|
| Bachelor | 0.41 | 0.42 | 0.45 | 0.81 | 0.48 | - | 0.18 |
| One Bedroom | 0.80 | 0.61 | 0.86 | 0.84 | 0.92 | 0.73 | 0.96 |
| Two Bedroom | 1.00 | 0.81 | 1.02 | 0.95 | 1.02 | 0.82 | 1.08 |
| Three Bedroom or Larger | 1.37 | 1.31 | 1.39 | 0.94 | 1.31 | 1.09 | 1.39 |
| All Types | 0.92 | 0.65 | 0.98 | 0.94 | 1.03 | 0.74 | 1.06 |

T-25A

4. Is this vehicle parked on the premises (apartment property when not in use?
5. IF "YES": Is it parked inside or outside?
6. IF "NO": Where do you usually park it?

TENANT PARKING ACCOMMODATION FOR ALL TENANT VEHICLES

BY BOROUGH

| | Borough | | | | |
|--------------------------|----------------|-----------------|---------------|---------------|----------------|
| | Total | City of Toronto | East York | Scarboro | North York |
| TOTAL NUMBER OF VEHICLES | 53,155 100% | 10,763 100% | 4,732 100% | 7,540 100% | 20,098 100% |
| | | | | | York |
| | | | | | Etobicoke |
| | | | | | 7,960 100% |

Parking Accommodation:

| | | | | | | | | | |
|-------------------|------|------|------|------|------|------|------|--|--|
| On Premises: | | | | | | | | | |
| Inside | 96.9 | 97.7 | 99.8 | 95.6 | 96.8 | 95.6 | 96.0 | | |
| Outside | 61.0 | 85.9 | 73.4 | 33.6 | 57.8 | 77.2 | 51.6 | | |
| | 35.9 | 11.8 | 26.4 | 62.0 | 39.0 | 18.4 | 44.4 | | |
| Off Premises: | | | | | | | | | |
| On street | 3.1 | 2.3 | 0.2 | 4.4 | 3.2 | 4.4 | 4.0 | | |
| On private lot | 0.9 | 1.4 | - | 1.7 | - | 2.8 | 1.5 | | |
| In private garage | 1.8 | 0.1 | - | 2.2 | 2.9 | 1.6 | 2.5 | | |
| Other | 0.3 | 0.8 | - | - | 0.3 | - | - | | |
| | 0.1 | - | 0.2 | 0.5 | - | - | - | | |

T-25B

I'd like to ask you about trips made yesterday by members of your household between 7:00 a.m. and 9:00 a.m.
16. What method of transportation did you use?

DISTRIBUTION OF WEEKDAY MORNING TRIPS (7:00-9:00 A.M.)

BY BOROUGH AND MODE OF TRANSPORTATION

| | T o t a l | City of Toronto | B o r o u g h | | | |
|------------------------------|----------------|--------------------|---------------|----------------|----------------|---------------|
| | | | East York | Scarboro | North York | Etobicoke |
| TOTAL TRIPS GENERATED (A.M.) | 74,148 100% | 20,278 100% | 6,513 100% | 10,405 100% | 24,705 100% | 8,844 100% |

Mode of Transportation:

| | | | | | | | |
|---------------------------|------|------|------|------|------|------|------|
| Auto Driver | 47.3 | 27.9 | 46.5 | 53.1 | 57.8 | 39.8 | 60.3 |
| Auto Passenger (Own Car) | 7.7 | 3.5 | 9.8 | 5.6 | 10.2 | 7.8 | 10.9 |
| Auto Passenger (Car Pool) | 5.4 | 2.1 | 4.6 | 7.7 | 6.3 | 7.1 | 7.9 |
| Taxi | 0.2 | 0.4 | - | - | - | 1.1 | - |
| Public Transport | 29.3 | 50.5 | 32.0 | 22.8 | 17.1 | 38.7 | 16.4 |
| Walk Only | 10.1 | 15.6 | 7.1 | 10.8 | 8.6 | 5.5 | 4.5 |

T-25C

I'd like to ask you about trips made yesterday by members of your household between 7:00 a.m. and 9:00 a.m.

AVERAGE NUMBER OF WEEKDAY MORNING TRIPS (7:00-9:00 A.M.)

GENERATED BY TYPE OF UNIT AND BOROUGH

| | <u>T o t a l</u> | <u>City of Toronto</u> | <u>B o r o u g h</u> | | | |
|-----------------------|------------------|----------------------------|----------------------|-----------------|-------------|------------------|
| | | | <u>North</u> | | | <u>Etobicoke</u> |
| | | | <u>East York</u> | <u>Scarboro</u> | <u>York</u> | |
| TOTAL NUMBER OF UNITS | 57,755 | 16,387 | 4,817 | 7,832 | 18,849 | 2,678 7,192 |

Type of Apartment:

| | | | | | | | |
|-------------------------|------|------|------|------|------|------|------|
| Bachelor | 0.91 | 0.95 | 1.00 | 0.80 | 0.83 | 0.62 | 0.41 |
| One Bedroom | 1.20 | 1.22 | 1.24 | 1.22 | 1.16 | 1.22 | 1.20 |
| Two Bedroom | 1.30 | 1.44 | 1.33 | 1.27 | 1.28 | 1.43 | 1.22 |
| Three Bedroom or Larger | 1.71 | 1.40 | 1.96 | 1.66 | 1.78 | 1.23 | 1.50 |
| All Types | 1.28 | 1.24 | 1.36 | 1.33 | 1.31 | 1.27 | 1.23 |

I'd like to ask you about trips made yesterday by members of your household between 4:00 p.m. and 7:00 p.m.
 25. What method of transportation did you use?

DISTRIBUTION OF WEEKDAY EVENING TRIPS (4:00-7:00 P.M.)

BY BOROUGH AND MODE OF TRANSPORTATION

| | T o t a l | City of Toronto | B o r o u g h | | | | | Etobicoke |
|--------------------------------|----------------|--------------------|---------------|----------------|----------------|---------------|---------------|-----------|
| | | | East York | Scarboro | North | | York | |
| | | | | | York | 100% | | |
| TOTAL TRIPS ATTRACTED (P.M.) | 74,142 100% | 20,820 100% | 6,469 100% | 10,039 100% | 24,324 100% | 3,129 100% | 9,361 100% | |
| <u>Mode of Transportation:</u> | | | | | | | | |
| Auto Driver | 44.0 | 26.8 | 42.5 | 48.9 | 53.2 | 32.1 | 57.7 | |
| Auto Passenger (Own Car) | 6.8 | 3.6 | 9.4 | 6.1 | 8.7 | 8.3 | 7.2 | |
| Auto Passenger (Car Pool) | 6.3 | 2.8 | 5.7 | 9.8 | 6.9 | 7.6 | 9.3 | |
| Taxi | 0.5 | 0.7 | 0.6 | - | 0.1 | 1.2 | 1.1 | |
| Public Transport | 30.7 | 48.2 | 33.9 | 22.0 | 20.7 | 46.5 | 19.4 | |
| Walk Only | 11.7 | 17.9 | 7.9 | 13.2 | 10.4 | 4.3 | 5.3 | |

T-25E

I'd like to ask you about trips made yesterday by members of your household between 4:00 p.m. and 7:00 p.m.

AVERAGE NUMBER OF WEEKDAY EVENING TRIPS (4:00-7:00 P.M.)

BY TYPE OF UNIT AND BOROUGH

| | T o t a l | City of Toronto | B o r o u g h | | | |
|-----------------------|-----------|--------------------|---------------|----------|---------------|-----------|
| | | | East York | Scarboro | North York | Etobiccke |
| TOTAL NUMBER OF UNITS | 57,755 | 16,387 | 4,817 | 7,832 | 18,849 | 2,678 |
| | | | | | | 7,192 |

Type of Apartment :

| | | | | | | | |
|-------------------------|------|------|------|------|------|------|------|
| Bachelor | 0.86 | 0.90 | 0.22 | 0.61 | 1.02 | 0.90 | 0.41 |
| One Bedroom | 1.22 | 1.28 | 1.27 | 1.20 | 1.13 | 1.14 | 1.25 |
| Two Bedroom | 1.33 | 1.49 | 1.33 | 1.23 | 1.32 | 1.21 | 1.28 |
| Three Bedroom or Larger | 1.60 | 1.55 | 1.90 | 1.56 | 1.55 | 1.49 | 1.70 |
| All Types | 1.28 | 1.28 | 1.34 | 1.28 | 1.29 | 1.17 | 1.30 |

T-25F

TENANT PARKING REQUIREMENTS BY SIZE OF BUILDINGCENTRAL AREA

| Percentage Occupancy by Tenants of Vehicle Parking Spaces | Number of Units | | | | | Over 200 |
|---|-----------------|-------|--------|---------|---------|-------------|
| | Under 50 | 50-75 | 76-100 | 101-150 | 151-200 | |
| More than 130 | - | - | - | - | - | - |
| 126 - 130 | - | - | - | - | - | - |
| 121 - 125 | - | - | - | - | - | - |
| 116 - 120 | - | - | - | - | - | - |
| 111 - 115 | - | - | - | - | - | - |
| 106 - 110 | - | - | - | - | - | - |
| 101 - 105 | - | - | - | - | - | - |
| 96 - 100 | - | - | - | - | 1 | - |
| 91 - 95 | - | - | - | - | - | 1 |
| 86 - 90 | - | - | - | - | - | - |
| 81 - 85 | - | - | - | - | - | - |
| 76 - 80 | - | 2* | - | - | - | - |
| 71 - 75 | - | 1 | 1 | - | - | - |
| 66 - 70 | - | - | 1* | - | - | 1* |
| 61 - 65 | - | 1 | 1 | - | - | - |
| 56 - 60 | - | 1 | 1 | 2 | - | 1 |
| 51 - 55 | - | 1 | 1 | 1 | 2 | - |
| 46 - 50 | - | 2 | 3 | - | - | 1 |
| 41 - 45 | - | - | - | - | - | 3 |
| 40 or Less | - | - | 1 | - | - | 1 |

NOTE: These figures represent the number of parking spaces rented to tenants (as compiled during the inventory phase of the survey) divided by the number of units in the building.

*Level at which 85% of the building parking requirements for tenants are satisfied (for 8 or more buildings)

TENANT PARKING REQUIREMENTS BY SIZE OF BUILDINGINNER AREA

| Percentage Occupancy by Tenants of Vehicle Parking Spaces | Number of Units | | | | | Over 200 |
|---|-----------------|-------|--------|---------|---------|-------------|
| | Under 50 | 50-75 | 76-100 | 101-150 | 151-200 | |
| More than 130 | - | - | - | - | - | - |
| 126 - 130 | - | - | - | - | - | - |
| 121 - 125 | - | - | - | - | - | - |
| 116 - 120 | - | 1 | - | - | - | - |
| 111 - 115 | - | 1 | - | - | - | - |
| 106 - 110 | - | - | - | 3 | - | 1 |
| 101 - 105 | - | - | 1 | - | - | 1* |
| 96 - 100 | 1 | - | - | - | 1 | - |
| 91 - 95 | 1* | - | 1 | 1 | - | 1 |
| 86 - 90 | 2 | - | 1 | - | - | 1 |
| 81 - 85 | - | - | 1 | - | 1* | - |
| 76 - 80 | 3 | - | - | - | 1 | - |
| 71 - 75 | - | 1 | - | 1 | - | - |
| 66 - 70 | - | - | 1 | 1 | 1 | 1 |
| 61 - 65 | - | - | 1 | - | 1 | 1 |
| 56 - 60 | - | - | - | 1 | - | - |
| 51 - 55 | - | - | - | - | - | 2 |
| 46 - 50 | - | 1 | - | - | 2 | 1 |
| 41 - 45 | - | - | - | - | - | - |
| 40 or Less | 1 | 1 | - | - | 1 | - |

NOTE: These figures represent the number of parking spaces rented to tenants (as compiled during the inventory phase of the survey) divided by the number of units in the building.

*Level at which 85% of the building parking requirements for tenants are satisfied (for 8 or more buildings)

TENANT PARKING REQUIREMENTS BY SIZE OF BUILDINGINTERMEDIATE AREA

| Percentage Occupancy by Tenants of Vehicle Parking Spaces | Number of Units | | | | | Over 200 |
|---|-----------------|-------|--------|---------|---------|-------------|
| | Under 50 | 50-75 | 76-100 | 101-150 | 151-200 | |
| More than 130 | 2 | - | 2 | - | - | - |
| 126 - 130 | - | 1 | - | - | - | - |
| 121 - 125 | 1 | 1 | - | - | - | - |
| 116 - 120 | - | 2* | - | - | - | - |
| 111 - 115 | 1 | 1 | 1 | 1 | 2 | - |
| 106 - 110 | 1* | 1 | 2* | - | - | 1 |
| 101 - 105 | 6 | 1 | 1 | 1 | - | 3* |
| 96 - 100 | 6 | 2 | - | - | - | 2 |
| 91 - 95 | 1 | 1 | - | 3* | 2 | 1 |
| 86 - 90 | 1 | - | 1 | 2 | - | 1 |
| 81 - 85 | - | - | 2 | 2 | - | 2 |
| 76 - 80 | 2 | - | 1 | 1 | - | 1 |
| 71 - 75 | - | 1 | - | - | - | - |
| 66 - 70 | 1 | - | - | - | - | 1 |
| 61 - 65 | 1 | - | - | 1 | - | 2 |
| 56 - 60 | - | - | 1 | - | 1 | 2 |
| 51 - 55 | - | 2 | - | - | 1 | - |
| 46 - 50 | 1 | 1 | 1 | - | - | 1 |
| 41 - 45 | - | 1 | 1 | 1 | - | 1 |
| 40 or Less | - | 2 | 1 | - | - | 2 |

NOTE: These figures represent the number of parking spaces rented to tenants (as compiled during the inventory phase of the survey) divided by the number of units in the building.

*Level at which 85% of the building parking requirements for tenants are satisfied (for 8 or more buildings)

TENANT PARKING REQUIREMENTS BY SIZE OF BUILDINGOUTER AREA

| Percentage Occupancy by Tenants of Vehicle Parking Spaces | Number of Units | | | | | Over 200 |
|---|-----------------|-------|--------|---------|---------|-------------|
| | Under 50 | 50-75 | 76-100 | 101-150 | 151-200 | |
| More than 130 | 4 | 4 | 4 | 5 | 3 | 2 |
| 126 - 130 | 1* | 1 | - | 2 | - | - |
| 121 - 125 | - | 1 | - | 3* | - | 2 |
| 116 - 120 | 3 | 3 | 1* | 1 | - | 1* |
| 111 - 115 | 2 | 6* | 6 | 6 | 3* | 2 |
| 106 - 110 | - | 9 | 2 | 6 | 3 | 5 |
| 101 - 105 | 1 | 5 | 1 | 6 | 2 | 5 |
| 96 - 100 | 10 | 14 | 8 | 8 | 6 | 2 |
| 91 - 95 | 1 | 7 | 2 | 4 | 2 | 1 |
| 86 - 90 | - | 5 | 1 | 3 | 6 | 2 |
| 81 - 85 | 4 | 2 | - | 1 | - | - |
| 76 - 80 | - | - | 3 | 1 | 3 | 3 |
| 71 - 75 | 2 | - | 1 | - | 2 | - |
| 66 - 70 | - | - | 1 | - | - | - |
| 61 - 65 | 1 | - | - | - | 1 | - |
| 56 - 60 | - | 1 | - | - | - | - |
| 51 - 55 | - | 1 | - | - | - | - |
| 46 - 50 | - | 1 | - | - | 1 | - |
| 41 - 45 | 1 | - | - | - | - | - |
| 40 or Less | - | 1 | - | 1 | - | - |

NOTE: These figures represent the number of parking spaces rented to tenants (as compiled during the inventory phase of the survey) divided by the number of units in the building.

*Level at which 85% of the building parking requirements for tenants are satisfied (for 8 or more buildings)

A P P E N D I X

APPENDIX I
SAMPLING VARIABILITY

As stated in the text, the data in this report are based upon sample apartment households rather than a census of all such households. As a result, each figure has a possible variance associated with sampling techniques. Such sampling variability was expected under the study design, but it is important that users of this report be aware of the resulting limitations of the data.

Table AI, A2, and A3 show the sampling variability of figures previously presented in Tables 13A, 19A, and 22A. As shown, each cell in the four-by-four matrix has a sampling variability associated with it, as do the four row totals, the four column totals, and the grand total. Generally, those cells in which a large sample was obtained exhibited less variability. Conversely, a few cells containing small samples were subject to much greater variability.

The interpretation of these figures may best be illustrated by example. Table AI shows an overall average of 0.92 vehicles per apartment household and a sampling variability of $\pm .04$.

APPENDIX I
SAMPLING VARIABILITY
(Continued)

This indicates that there is a 95% probability (2 standard deviations) that the actual mean or average for this figure is between 0.88 and 0.96 vehicles per apartment household. Similarly, in Tables A2 and A3 the average number of trips generated or attracted per household was 1.28 and the sampling variability was $\pm .07$. There is a 95% probability that the actual average is between 1.21 and 1.35 trips per household.

It has not been possible to construct a curve of sampling variability which could be applied to other figures in this report. If such variability figures were required, a separate calculation would be required for each such table. However, the figures provided herein indicate the general magnitude of the sampling variability which might be expected.

TABLE AI

SAMPLING VARIABILITY

OF AVERAGE NUMBER OF VEHICLES

OWNED BY AREA AND TYPE OF UNIT

Geographical Area

| Type of Unit: | Geographical Area | | | | |
|-------------------------|-------------------|-------------------|-----------------|-----------------|------------------|
| | Total | Central | Inner | Intermediate | Outer |
| Bachelor | 0.41 + - .08 | 0.23 + - .12 | 0.46 + - .10 | 0.49 + - .03 | 0.60 + - .50* |
| One Bedroom | 0.80 + - .10 | 0.58 + - .01 | 0.62 + - .13 | 0.76 + - .16 | 0.97 + - .15 |
| Two Bedroom | 1.00 + - .02 | 0.71 + - .19 | 0.95 + - .08 | 0.89 + - .13 | 1.07 + - .08 |
| Three Bedroom or Larger | 1.37 + - .04 | 1.00 + - 1.00* | 1.28 + - .09 | 1.36 + - .21 | 1.38 + - .08 |
| All Types | 0.92 + - .04 | 0.55 + - .01 | 0.73 + - .11 | 0.82 + - .12 | 1.08 + - .01 |

* These cells contained very small samples - only 1 three bedroom unit in the central zone and 5 bachelor units in the outer zone.

T-AI

RECON

TABLE A2

SAMPLING VARIABILITYOF MORNING TRIPS GENERATEDBY AREA AND TYPE OF UNIT

| Type of Unit | G e o g r a p h i c a l A r e a | | | |
|-------------------------|-----------------------------------|----------------|--------------|----------------------------------|
| | <u>T o t a l</u> | <u>Central</u> | <u>Inner</u> | <u>Intermediate</u> <u>Outer</u> |
| Bachelor | 0.91 ± .08 | 0.90 ± .01 | 0.87 ± .13 | 0.98 ± .12 0.79 ± 1.50* |
| One Bedroom | 1.20 ± .06 | 1.26 ± .07 | 1.06 ± .11 | 1.28 ± .23 1.19 ± .05 |
| Two Bedroom | 1.30 ± .06 | 1.70 ± .26 | 1.30 ± .04 | 1.33 ± .22 1.27 ± .16 |
| Three Bedroom or Larger | 1.71 ± .06 | ± * | 1.42 ± .67 | 1.53 ± .24 1.76 ± .07 |
| All Types | 1.28 ± .07 | 1.30 ± .11 | 1.13 ± .07 | 1.29 ± .02 1.32 ± .08 |

* These cells contained very small samples.

TABLE A3

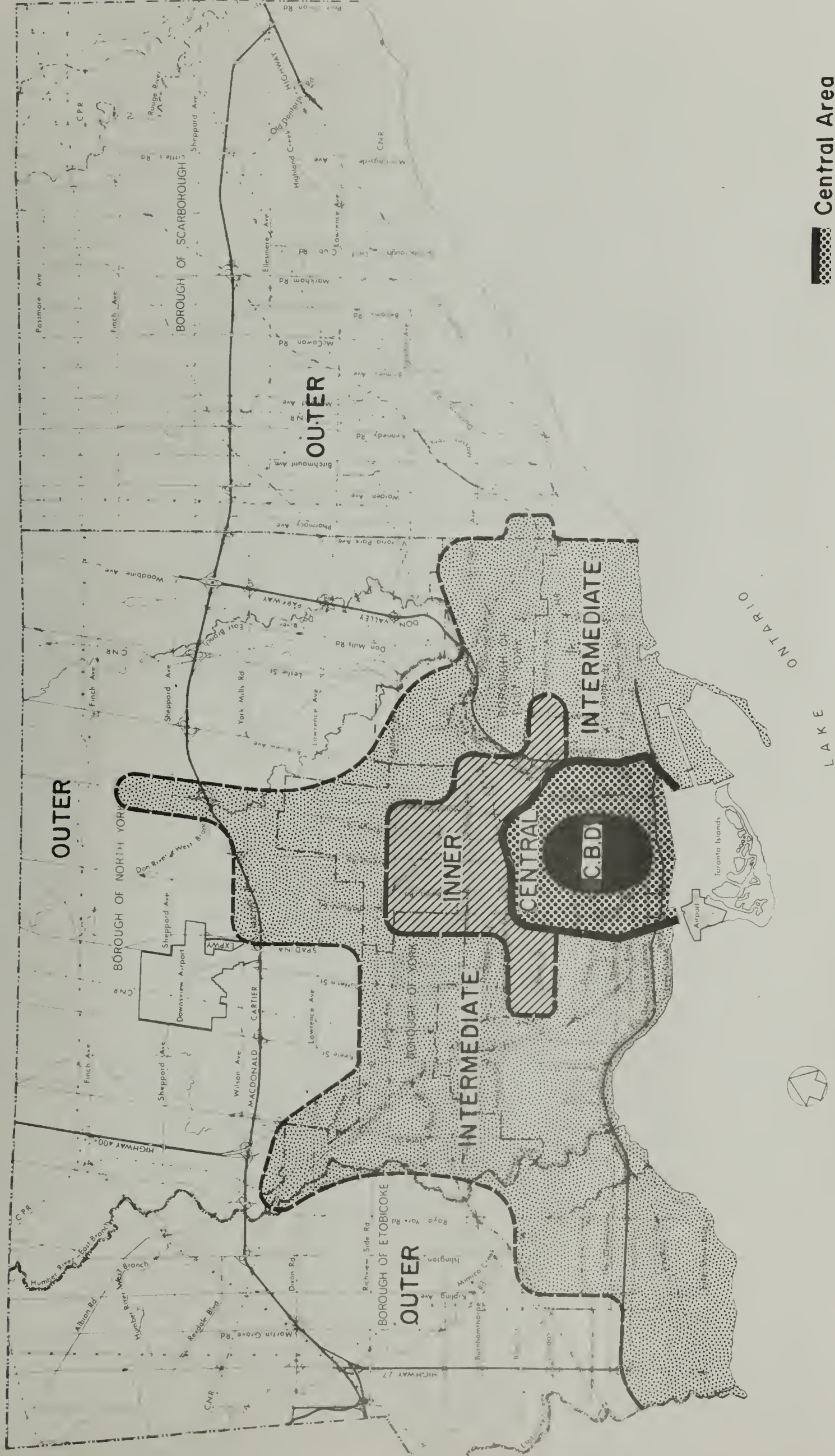
SAMPLING VARIABILITY

OF EVENING TRIPS ATTRACTED

BY AREA AND TYPE OF UNIT

| | G e o g r a p h i c a l A r e a | | | | |
|-------------------------|-----------------------------------|----------------|--------------|---------------------|--------------|
| Type of Unit: | <u>T o t a l</u> | <u>Central</u> | <u>Inner</u> | <u>Intermediate</u> | <u>Outer</u> |
| Bachelor | 0.86 ± .07 | 0.95 ± .09 | 0.77 ± .11 | 0.91 ± .04 | 0.70 ± 1.62* |
| One Bedroom | 1.22 ± .05 | 1.32 ± .11 | 1.12 ± .13 | 1.31 ± .23 | 1.17 ± .05 |
| Two Bedroom | 1.33 ± .05 | 1.75 ± .13 | 1.39 ± .13 | 1.33 ± .06 | 1.28 ± .05 |
| Three Bedroom or Larger | 1.60 ± .26 | - ± * | 1.60 ± .42 | 1.57 ± .17 | 1.61 ± .32 |
| All Types | 1.28 ± .07 | 1.35 ± .07 | 1.17 ± .12 | 1.30 ± .08 | 1.30 ± .05 |

* These cells contained very small samples.



- Central Area
- Inner Area
- Intermediate Area
- Outer Area



RECON
LIMITED

RESEARCH CONSULTANTS

May 29th, 1968

Dear Sir or Madam:

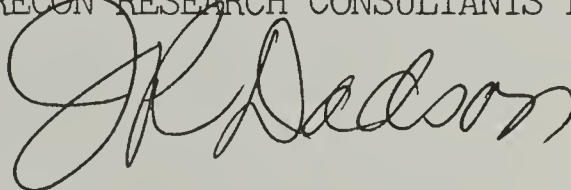
Our firm is conducting a study for the Metropolitan Toronto Planning Board to investigate traffic and parking requirements at apartment buildings.

The information obtained from about 2000 apartments in Metropolitan Toronto will permit careful planning of adequate parking facilities.

Within the next few days, our interviewer will contact you with a few questions about your parking requirements and the trips taken by the members of your apartment. We would be most grateful for your co-operation.

Yours sincerely,

RECON RESEARCH CONSULTANTS LIMITED

A handwritten signature in dark ink, appearing to read 'J.R. Dadson', written in a cursive style.

J.R. Dadson, Project Director

TENANT QUESTIONNAIRE

PROJECT: 68360

ZONE CODE

SAMPLE

BUILDING # TENANT:

TELEPHONE:

| | | | | | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|---|---|----------------|-------|
| CONTACT | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | Contacted Day: | Date: |
|---------|---|---|---|---|---|---|---|---|---|---|----------------|-------|

Hello, I'm _____ of Recon Research Consultants Limited. I am conducting a parking and transportation survey for the Metropolitan Toronto Planning Board, and I would like to ask you a few questions. Before we start, I'd like to assure you that all replies are confidential and the data will only be used in group form.

Household Data:

From Sample, Apartment Is:

1. First, what type of apartment is this
- | | |
|------------------------------|---|
| BACHELOR..... | 1 |
| ONE BEDROOM..... | 2 |
| TWO BEDROOM..... | 3 |
| THREE BEDROOM OR LARGER..... | 4 |

INTERVIEWER. RESOLVE DISCREPANCY BEFORE CONTINUING

- 2.(a) How many people, including yourself, live in your household?

- (b) How many are males, 18 or over?

How many are females 18 or over?

How many are children under 6?

6 to 12?

13 to 17?

CHECK TOTAL WITH 2.(a)

- (c) In total how many persons are working FULL TIME PART TIME

- (d) Is this shared accommodation or are you all one family? SHARED.....1
FAMILY.....2

- (e) Now considering all working members of this household would the total income of this apartment be:

| | |
|---------------------------|---|
| UNDER \$4,000..... | 1 |
| \$4,000 to \$5,999..... | 2 |
| \$6,000 to \$7,999..... | 3 |
| \$8,000 to \$9,999..... | 4 |
| \$10,000 to \$11,999..... | 5 |
| \$12,000 to \$13,999..... | 6 |
| \$14,000 or OVER..... | 7 |

IF REFUSED TO STATE ASK: Would it be over or under \$8,000? OVER.....1 UNDER.....2
ABOUT \$8,000.....3

3. How many vehicles (including both cars and trucks) are owned or leased and driven by members of your household and normally parked at this address?

IF NO VEHICLES OWNED OR LEASED, GO TO QUESTION 8.

ASK FOR EACH VEHICLE OWNED OR LEASED:

| | <u>Vehicle 1</u> | <u>Vehicle 2</u> | <u>Vehicle 3</u> |
|----|--|--|--|
| 4. | Is this vehicle parked on the premises (apartment property) when not in use? | Is this vehicle parked on the premises (apartment property) when not in use? | Is this vehicle parked on the premises (apartment property) when not in use? |
| | NO....2 YES....1 | NO....2 YES....1 | NO....2 YES....1 |
| 5. | IF "YES" Is it parked inside or outside? | IF "YES" Is it parked inside or outside? | IF "YES" Is it parked inside or outside? |
| | INSIDE.....1 OUTSIDE....2 | INSIDE.....1 OUTSIDE....2 | INSIDE.....1 OUTSIDE....2 |
| 6. | IF "NO" Where do you usually park it? | IF "NO" Where do you usually park it? | IF "NO" Where do you usually park it? |
| | ON THE STREET.....1 ON PRIVATE PARKING LOT...2 IN PRIVATE GARAGE.....3 OTHER(SPECIFY).....4 | ON THE STREET.....1 ON PRIVATE PARKING LOT...2 IN PRIVATE GARAGE.....3 OTHER(SPECIFY).....4 | ON THE STREET.....1 ON PRIVATE PARKING LOT...2 IN PRIVATE GARAGE.....3 OTHER(SPECIFY).....4 |

ASK ALL VEHICLE OWNERS:

7. How much does it cost you for parking per month at your residence?

Vehicle No.1 _____

Vehicle No.2 _____

Vehicle No.3 _____

ASK EVERYONE:

8. What is your monthly apartment rent, excluding any parking costs? _____

THE NEXT SECTION OF THE QUESTIONNAIRE WILL ENABLE US TO DETERMINE PARKING REQUIREMENTS FOR VISITORS.

Visitor Parking:

9. Was your apartment visited by friends or relatives last weekend, from Friday to Sunday?

YES.....1 NO....2 -- IF "NO", SKIP TO SECTION "TRIP DATA"

IF "YES"

10. What day was that? RECORD ON NEXT PAGE

11.(a) What time(s) did they arrive? RECORD ON NEXT PAGE

(b) What time(s) did they leave? RECORD ON NEXT PAGE

12. Did they require a place to park their car? RECORD ON NEXT PAGE

IF "YES"

13. Where did they park their car? RECORD ON NEXT PAGE

| TIME OF ARRIVAL | TIME OF DEPARTURE | | | REQUIRED PARKING YES 1 NO 2 | | WHERE PARKED | | | |
|--------------------|-------------------|----------|--------|-----------------------------------|---|-----------------------------|------------------------|----------------------------|-----------------------|
| | Friday | Saturday | Sunday | | | ON APARTMENT PREMISES.....1 | ON NEARBY STREET.....2 | ON NEARBY PARKING LOT....3 | OTHER (SPECIFY).....4 |
| Friday: | | | | 1 | 2 | 1 | 2 | 3 | 4 |
| | | | | 1 | 2 | 1 | 2 | 3 | 4 |
| | | | | 1 | 2 | 1 | 2 | 3 | 4 |
| | | | | 1 | 2 | 1 | 2 | 3 | 4 |
| | | | | 1 | 2 | 1 | 2 | 3 | 4 |
| Saturday: | | | | 1 | 2 | 1 | 2 | 3 | 4 |
| | | | | 1 | 2 | 1 | 2 | 3 | 4 |
| | | | | 1 | 2 | 1 | 2 | 3 | 4 |
| | | | | 1 | 2 | 1 | 2 | 3 | 4 |
| | | | | 1 | 2 | 1 | 2 | 3 | 4 |
| Sunday: | | | | 1 | 2 | 1 | 2 | 3 | 4 |
| | | | | 1 | 2 | 1 | 2 | 3 | 4 |
| | | | | 1 | 2 | 1 | 2 | 3 | 4 |
| | | | | 1 | 2 | 1 | 2 | 3 | 4 |
| | | | | 1 | 2 | 1 | 2 | 3 | 4 |
| | | | | 1 | 2 | 1 | 2 | 3 | 4 |

We are also interested in traffic coming to and going from the major apartment buildings during the morning and evening peak periods. I'd like to ask you about trips made yesterday by the members of your household, either between 7 a.m. - 9 a.m. or 4 p.m. to 7 p.m.

OBTAIN THE FOLLOWING DATA FOR EACH HOUSEHOLD MEMBER WHO MADE TRIPS YESTERDAY. IT IS NOT NECESSARY TO QUESTION EACH TRIP-TAKER. ONE ADULT MEMBER MAY ANSWER FOR ALL HOUSEHOLD MEMBERS. (NEXT PAGE)

TRIP DATA

14. Person Number

MORNING TRIPS:

15. What time did you start from home?

16. What method of transportation did you use?

AUTO DRIVER
PASSENGER(OWN CAR)
PASSENGER(CAR POOL)
TAXI
PUBLIC TRANSPORT
WALK ONLY

17. Were you going to work?

18. IF"YES"-What is the address of your place of work? (STREET AND NUMBER)

19. Did you return to your apartment between 7 a.m. and 9 a.m.?

YES
NO

20. IF"YES"-What method of transportation did you use?

AUTO DRIVER
PASSENGER(OWN CAR)
PASSENGER (CAR POOL)
TAXI
PUBLIC TRANSPORT
WALK ONLY

21. IF"YES"-What time did you return?

22. Did any friends or relatives come to your apartment between 7.am. and 9 a.m. or were any residents picked up by a car pool?

YES.....1
NO.....2

23. What method of transportation did they use?

AUTO DRIVER.....1
PASSENGER (OWN CAR).....2
CAR POOL3
TAXI.....4
PUBLIC TRANSPORT.....5
WALK ONLY.....6

| NO. | NO. | NO. | NO. |
|---------------|---------------|---------------|---------------|
| a.m. | a.m. | a.m. | a.m. |
| 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 |
| YES...1 NO..2 | YES...1 NO..2 | YES...1 NO..2 | YES...1 NO..2 |
| | | | |
| 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 |
| 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 |
| a.m. | a.m. | a.m. | a.m. |

EVENING TRIPS

5.

| | NO. | NO. | NO. | NO. |
|---|------|------|------|------|
| 24. What time did you arrive home in the evening? | p.m. | p.m. | p.m. | p.m. |
| 25. What method of transportation did you use? | | | | |
| AUTO DRIVER | 1 | 1 | 1 | 1 |
| PASSENGER(OWN CAR) | 2 | 2 | 2 | 2 |
| PASSENGER(CAR POOL) | 3 | 3 | 3 | 3 |
| TAXI | 4 | 4 | 4 | 4 |
| PUBLIC TRANSPORT | 5 | 5 | 5 | 5 |
| WALK ONLY | 6 | 6 | 6 | 6 |
| 26. IF RETURNED BEFORE 7.P.M.ASK: Did you go out again between 4 p.m. and 7 p.m.? | | | | |
| YES | 1 | 1 | 1 | 1 |
| NO | 2 | 2 | 2 | 2 |
| 27. IF"YES": What time was that? | p.m. | p.m. | p.m. | p.m. |
| 28. What method of transportation did you use? | | | | |
| AUTO DRIVER | 1 | 1 | 1 | 1 |
| PASSENGER (OWN CAR) | 2 | 2 | 2 | 2 |
| PASSENGER(CAR POOL) | 3 | 3 | 3 | 3 |
| TAXI | 4 | 4 | 4 | 4 |
| PUBLIC TRANSPORT | 5 | 5 | 5 | 5 |
| WALK ONLY | 6 | 6 | 6 | 6 |
| 29. What time did you come back? | p.m. | p.m. | p.m. | p.m. |
| 30. What method of transportation did you use? | | | | |
| AUTO DRIVER | 1 | 1 | 1 | 1 |
| PASSENGER (OWN CAR) | 2 | 2 | 2 | 2 |
| PASSENGER(CAR POOL) | 3 | 3 | 3 | 3 |
| TAXI | 4 | 4 | 4 | 4 |
| PUBLIC TRANSPORT | 5 | 5 | 5 | 5 |
| WALK ONLY | 6 | 6 | 6 | 6 |

6.

31. Did you have any visitors arrive at your apartment between 4 p.m. and 7 p.m.? YES.....1
NO.....2

32. IF "YES" - What time did they arrive? _____p.m.

33. IF "YES" - What method of transportation did they use?

AUTO DRIVER.....1
AUTO PASSENGER.....2
PUBLIC TRANSPORT.....3
TAXI.....4
WALK ONLY.....5

34. Did you have any visitors who left between 4 p.m. and 7 p.m.? YES.....1
NO.....2

35. IF "YES" - What time did they leave? _____p.m.

36. IF "YES" - What method of transportation did they use?

AUTO DRIVER.....1
AUTO PASSENGER.....2
PUBLIC TRANSPORT.....3
TAXI.....4
WALK ONLY.....5

INTERVIEWER'S NAME: _____

DATE: _____

